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No. ____

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IN THE

Supreme Court of the United States

CABLE NEWS NETWORK, INC. ET AL.
Petitioners,

v.

CSC HOLDINGS, INC. AND CABLEVISION SYSTEMS CORP.,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Second Circuit

PETITION FOR A WRIT OF CERTIORARI

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October 6, 2008

QUESTIONS PRESENTED

1. Whether the Second Circuit's ruling that Cablevision is not legally responsible for its copying and performance of Petitioners' copyrighted works fundamentally destabilizes copyright law and inverts the proper relationship between direct and secondary copyright infringement, due to the court's expansive misreading of *Sony Corp. v. Universal Studios* and complete disregard of *New York Times v. Tasini.*

2. Whether the Second Circuit erred in ruling that Cablevision is not directly liable for its copying of Petitioners' programs because (1) Cablevision designed and operates its service to use computers, rather than human beings, to make copies for customers who request them, and (2) "buffer" copies that Cablevision itself admittedly creates in that process are not "fixed," under a misreading of the plain language of the Copyright Act that conflicts with the interpretation uniformly adopted by three other Circuits and the Copyright Office.

3. Whether the Second Circuit erred by holding – under an interpretation of the Copyright Act that conflicts with the plain statutory language and decisions of other Circuits – that Cablevision's performances of Petitioners' programs are not "public," and therefore not infringing, because Respondent designed its service to send separate on-demand transmissions generated from separate copies of the same program to members of the public.

PARTIES TO THE PROCEEDING

Pursuant to Rule 14.1(b), the following list identifies all of the parties appearing here and before the United States Court of Appeals for the Second Circuit.

The petitioners here and appellees below are The Cartoon Network, Inc. (formerly known as The Cartoon Network LP, LLLP); Cable News Network, Inc. (an entity formed following the merger of Cable News Network LP, LLLP into CNN Investment Company, Inc.); Turner Broadcasting System, Inc.; Turner Network Sales, Inc.; Turner Classic Movies, Inc.; Turner Network Television, Inc.; Twentieth Century Fox Film Corporation; Universal City Studios Productions LLLP; Paramount Pictures Corporation; Disney Enterprises Inc.; CBS Broadcasting Inc.; American Broadcasting Companies, Inc.; and NBC Studios, Inc.,

Respondents here and appellants below are CSC Holdings, Inc. and Cablevision Systems Corp.

CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 29.6, petitioners state as follows:

Petitioner Twentieth Century Fox Film Corporation is a wholly owned subsidiary of Fox Entertainment Group, Inc. The parent of Fox Entertainment Group, Inc. is News Corporation, a publicly traded U.S. corporation. No publicly held company owns 10% or more of News Corporation's stock.

Petitioner Universal City Studios Productions LLLP is wholly and indirectly owned by NBC Universal, Inc. NBC Universal, Inc. is indirectly owned by General Electric Company, a publicly traded U.S. corporation, and Vivendi, S.A., a publicly traded French company. No publicly held company owns 10% or more of General Electric Company's or Vivendi S.A.'s stock.

Petitioner Paramount Pictures Corporation is wholly and indirectly owned by Viacom Inc., a publicly traded U.S. corporation. No publicly held company owns 10% or more of Viacom Inc.'s stock.

Petitioner Disney Enterprises, Inc. is a subsidiary of The Walt Disney Company, a publicly traded U.S. corporation. No publicly held company owns 10% or more of The Walt Disney Company's stock.

Petitioner CBS Broadcasting Inc. is an indirect, wholly owned subsidiary of CBS Corporation, a publicly traded U.S. corporation. No publicly held company owns 10% or more of CBS Corporation's stock.

Petitioner American Broadcasting Companies, Inc. is an indirect, wholly owned subsidiary of The Walt Disney Company, a publicly traded U.S. corporation. No publicly held company owns 10% or more of The Walt Disney Company's stock.

Petitioner NBC Studios, Inc. is wholly and indirectly owned by NBC Universal, Inc. NBC Universal, Inc. is indirectly owned by General Electric Company, a publicly traded U.S. corporation, and Vivendi, S.A., a publicly held French Company. No publicly held company owns 10% or more of General Electric Company's or Vivendi S.A.'s stock.

Petitioner The Cartoon Network, Inc. (formerly known as The Cartoon Network LP, LLLP) is owned entirely by TEN Network Holding, Inc., which is a wholly owned indirect subsidiary of Turner Broadcasting System, Inc. The Cartoon Network, Inc. is ultimately and indirectly owned by Time Warner Inc., a publicly traded company. No publicly held company owns 10% or more of Time Warner Inc.'s stock.

Petitioner Cable News Network, Inc. (an entity that was formed following the merger of Cable News Network LP, LLLP into CNN Investment Company, Inc.) is owned entirely by Turner Broadcasting

System, Inc. Cable News Network, Inc. is ultimately and indirectly owned by Time Warner Inc., a publicly traded company. No publicly held company owns 10% or more of Time Warner Inc.'s stock.

Petitioner Turner Broadcasting System, Inc. is jointly owned by Historic TW Inc., American Television and Communications Corporation, Warner Communications Inc., United Cable Turner Investment, Inc. and Time Warner Companies, Inc. Turner Broadcasting System, Inc. is ultimately and indirectly owned by Time Warner Inc., a publicly traded company. No publicly held company owns 10% or more of Time Warner Inc.'s stock.

Petitioner Turner Network Sales, Inc. is owned entirely by Turner Broadcasting System, Inc. Turner Network Sales, Inc. is ultimately and indirectly owned by Time Warner Inc., a publicly traded company. No publicly held company owns 10% or more of Time Warner Inc.'s stock.

Petitioner Turner Classic Movies, Inc. (formerly known as Turner Classic Movies LP, LLLP) is owned entirely by TEN Network Holding, Inc., which is a wholly owned indirect subsidiary of Turner Broadcasting System, Inc. Turner Classic Movies, Inc. is ultimately and indirectly owned by Time Warner Inc., a publicly traded company. No publicly held company owns 10% or more of Time Warner Inc.'s stock.

Petitioner Turner Network Television, Inc. (formerly known as Turner Network Television LP, LLLP) is owned entirely by TEN Network Holding, Inc., which is a wholly owned indirect subsidiary of Turner Broadcasting System, Inc. Turner Network Television, Inc. is ultimately and indirectly owned by Time Warner Inc., a publicly traded company. No publicly held company owns 10% or more of Time Warner Inc.'s stock.

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The court of appeals' opinion is reported at 536 F.3d 121 and reprinted at Pet. App. 1a-42a. The district court's opinion is reported at 478 F. Supp. 2d 607 and reprinted at Pet. App. 43a-80a.

JURISDICTION

The court of appeals entered judgment on August 4, 2008. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS INVOLVED

This case involves provisions of the Copyright Act, 17 U.S.C. § 101 *et seq.*, reproduced at Pet. App. 81a-103a.

STATEMENT

A. Introduction

This case presents critical questions about the application of copyright law to automated computerized services that are rapidly reshaping how copyrighted works are reproduced, delivered, and consumed. Respondent Cablevision – a cable television operator – is launching a new service that automatically copies Petitioners' copyrighted television programming and then transmits those programs to subscribers on request, without authorization from copyright owners. Cablevision copies, stores, and transmits the programs at its own central facility, on a system that it designed and operates and that is under its exclusive physical possession and control, using copyrighted works it selects and supplies for this purpose. In essence, Cablevision is taking programs it has licensed for its cable television service and misappropriating that content for an additional *unlicensed* use.

The Second Circuit reached the remarkable conclusion that Cablevision itself is not doing anything that infringes the exclusive rights of copyright owners to reproduce and publicly perform their works. The court attempted to justify that conclusion by reference to *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), reasoning that a subscriber asking Cablevision to copy and transmit programming is not "sufficiently distinguishable from a VCR user to impose liability as a direct infringer on [Cablevision] for copies that are made automatically upon that customer's command." Pet. App. 21a. Therefore, Cablevision could at most be liable as a secondary infringer under the standards of *Sony*.

That ruling fundamentally distorts copyright law by inverting the proper relationship between direct and secondary infringement. The Second Circuit expansively misread *Sony* – which did not even address the line between direct and secondary infringement, much less exempt automated services from direct liability – while ignoring this Court's ruling in *New York Times Co. v. Tasini*, 533 U.S. 483, 504 (2001), which considered and rejected the same argument the Second Circuit accepted here. Further, in order to implement its misguided immunity for Cablevision, the Second Circuit cast aside long-settled understandings of the reproduction and public performance rights that are set forth in the plain language of the Copyright Act and decisions of other Circuits. As shown below, each of the conflicts and errors running through the Second Circuit's decision merits review in its own right. When they are all combined, the case for certiorari is especially compelling.

Practical considerations reinforce the pressing need for review. The Second Circuit has placed its influential imprimatur on what amounts to a blueprint for clever intermediaries to design and operate automated computer systems so as to evade the need for copyright licenses. That ruling undercuts investments in established *licensed* services made in reliance on settled law. If unchecked, this new free-riding business model will quickly become entrenched and difficult to dislodge through retroactive judicial repudiation. As automated delivery becomes the norm, the incentive to invest in the production of creative works and innovative mechanisms for their delivery will be jeopardized. The need for intervention by this Court could hardly be stronger.

B. The Copyright Act of 1976

Section 106 of the Copyright Act gives copyright owners "the exclusive rights to do and to authorize" the exploitation of their works in several ways. 17 U.S.C. § 106. In defining these rights, Congress used broad terminology to cover both anticipated and unanticipated developments in technology, obviating the constant need for new legislation.[1]

Two exclusive rights are at issue here. The first is the right "to reproduce the copyrighted work in copies." *Id.* § 106(1). "Copies" are defined broadly as "material objects . . . in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." *Id.* § 101. The standard for whether a work is "fixed" is similarly broad and functional to encompass new technology: the work's "embodiment in a copy" must be "sufficiently permanent or stable to permit [the work] to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." *Id.*

The second exclusive right is the right "to perform the copyrighted work publicly." *Id.* § 106(4). Again using broad language, Congress made clear that this right includes separate transmissions of performances to individual members of the public when and where they want it:

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[1] "A real danger to be guarded against is that of confining the scope of an author's rights on the basis of the present technology so that, as the years go by, his copyright loses much of its value because of unforeseen technical advances. For these reasons, we believe that the author's rights should be stated in the statute in broad terms . . . ." *Supplemental Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law:* 1965 Revision Bill, Copyright Law Revision Part 6 at 13-14, 89th Cong., 1st Sess. (Comm. Print 1965).

> To perform . . . a work "publicly" means: . . .
>
> (2) to transmit . . . a performance . . . of the work . . . to the public, by means of any device or process, whether the members of the public capable of receiving the performance . . . receive it in the same place or in separate places and at the same time or at different times.

Id. § 101.

That expansive definition also encompasses retransmission of television broadcasts by cable companies. *See, e.g.*, *WGN Cont'l Broad. Co. v. United Video, Inc.*, 693 F.2d 622, 624-25 (7th Cir. 1982) (describing how 1976 Act changed this aspect of law). At the same time, Congress gave cable companies a statutory license for certain "secondary transmissions" of broadcast television – but only when a secondary transmission takes place at the same time and in the same form as the broadcast. 17 U.S.C. § 111(c) & (f).[2]

Accordingly, a cable company must negotiate an additional license to make copies of a broadcast program or to delay or alter its transmission. Furthermore, because the § 111 statutory license covers only broadcast programming, a cable company must negotiate a license for *any* transmission or copying of programming from non-broadcast channels (*e.g.*, ESPN or CNN).

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[2] Congress delegated to the Register of Copyrights the authority to administer § 111. *See Cablevision Sys. Dev. Co. v. Motion Picture Ass'n of Am., Inc.*, 836 F.2d 599, 608 (D.C. Cir. 1988).

C. Automated Delivery of Copyrighted Works

This case concerns the Copyright Act's application to new computerized commercial services that are transforming how businesses provide access to, and how the public receives, copyrighted works. Petitioners, and their licensed business partners, are aggressively moving to make their creative works available to the public via computerized systems that automatically respond to customer requests to copy, watch, or download a particular program when and where the consumer wants it.

Automated services have existed for some time, but their rate of growth is now accelerating exponentially. As early as 2005, the number of "intensive on-demand media consumers" (those who use networked on-demand services in multiple ways) doubled from 11% to 21% of the public. Joel Russell, *The Age of Media On-Demand Looks Like It's Close at Hand*, L.A. Bus. J., May 29, 2006, at 16. That same year, 23% of the U.S. audience used video on-demand ("VOD"), and 10% watched television programming via streaming video on the Internet. *Id.* This market sector has continued to experience exponential growth since then. *See* Brooks Barnes, *ABC, Cox Bar Ad Skipping in Video on Demand*, Wall St. J., May 8, 2007, at B1. Similarly, Apple's well-known iTunes service is selling more than 50,000 movies a day.[3]

Unfortunately, this development also provides fertile ground for "intermediaries" who have access to copyrighted works for one purpose (such as an initial broadcast into the home), but take advantage of the possibilities of modern digital technology to profit from that content in other, unauthorized ways, such as streaming on-demand performances or distributing permanent copies. By exploiting creative works without a license, these commercial operations are able to appropriate the value of the works that would otherwise accrue to the copyright owner.

D. Cablevision's Service

Cablevision offers a traditional cable service that allows its subscribers to view broadcast and non-broadcast programming. Pet. App. 4a. Its § 111 statutory license for broadcast stations and its negotiated licenses for non-broadcast programming authorize Cablevision to transmit these programs on a real-time basis directly to subscribers, in an uninterrupted and unaltered stream from Cablevision's central facility (called a "head-end") to each subscriber's home.

In addition, Cablevision offers a VOD service that allows customers to watch certain programs on demand at times of their choosing. *Id.* at 49a.

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[3] *Apple's iTunes Hits 5 Billion Mark*, CNETNews.com, June 19, 2008, available at http://news.cnet.com/8301-10784_3-9972528-7.html.

Cablevision has negotiated additional licenses from copyright owners to include programs in this service. *Id.*

Cablevision also offers subscribers set-top digital video recorder ("DVR") devices. *Id.* at 50a. The original DVR was a stand-alone copying device. Set-top DVRs reside in subscribers' homes, where all copying and playback occurs. Cablevision never possesses copies made on a set-top DVR, and does not transmit anything to a subscriber's home when a recorded program is replayed. *Id.*

More recently, Cablevision began developing the service at issue here. Cablevision's internal engineering specifications described it as a "VOD network" using "VOD architecture." 2d Cir. Joint Appendix C.A. 57-58, 352-53, 556-57, 626-27. In 2004, Cablevision indicated that all content offered by the service would be licensed from copyright owners. *Id.* at 61. By the time Cablevision announced the service, however, it had been relabeled as "Remote-Storage DVR" ("RS-DVR"), and Cablevision asserted it required no licenses.

Labels aside, Cablevision selects and supplies the range of copyrighted programs available on its "RS-DVR" service; makes copies of specific programs at Cablevision's central head-end facility at the request of subscribers; and then transmits performances of those shows from Cablevision's head-end to subscribers' homes when they want to view them. Pet. App. 53a, 56a, 58a. In the process, Cablevision makes a separate copy of a program for each subscriber who requests it. If 100,000 subscribers request the entire season of the hit show *24*, Cablevision makes 100,000 identical copies of each episode of that series as it airs, and "assigns" one copy of each episode to each requesting subscriber. *Id.* at 58a. When a subscriber wants to view a particular episode, Cablevision transmits it to that subscriber using the particular copy Cablevision made and assigned. *Id.* at 59a-60a. No technological purpose is served by Cablevision's decision to make all these redundant copies. They exist only to support Cablevision's legal theory, which is (paradoxically) that Cablevision is exempt from copyright liability precisely because it makes *so many* copies – one for each requesting subscriber.

The decisions below describe the operation of the "RS-DVR" service in detail. *Id.* at 4a-6a, 51a-60a. Briefly, to provide its "RS-DVR" service, Cablevision heavily manipulates the stream of digital data for programming before it leaves Cablevision's head-end. Cablevision first splits the data stream in two. One stream flows to subscribers in real time pursuant to Cablevision's licenses for traditional cable service, providing scheduled programming without delay or alteration of the signal supplied by the programmers. *Id.* at 4a-5a.

The second, unlicensed stream is used for the "RS-DVR" service. *Id.* at 5a. That stream initially flows to a device at Cablevision's facility called a Broadband Multimedia-Service Router ("BMR"), where the data are copied and "buffered" — held in temporary random access memory ("RAM") — in 1.2-second increments. *Id.* This buffering allows the

BMR to reformat the digital program files in a way that permits their reproduction in permanent copies at later stages. *Id.*

The reformatted data go next to the so-called "Arroyo server," where they are copied into a "primary ingest buffer." *Id.* at 55a-56a. This buffer copies and stores three frames of video at a time for up to one-tenth of a second, which permits Cablevision to check whether customers have requested copies of a program and then make permanent copies if they have. *Id.*

The BMR and Arroyo buffer copies play no part in Cablevision's licensed transmission of programming. *Id.* at 53a-54a. They exist solely to permit reproduction of programs in permanent copies for later unlicensed transmission over the "RS-DVR" service. Cablevision takes all of the steps described above regardless of whether it has received a "copy" request from a subscriber. *Id.* at 56a.

Subscriber requests for copies enter the scene only *after* the programming data are buffered in the Arroyo Server. If one or more subscribers have requested a copy of a program, Cablevision's system instructs the server to use the buffer copy data to make a permanent copy of that program for each requesting subscriber, and then stores those copies at Cablevision's head-end. *Id.* at 56a-58a. When a subscriber later wants to watch a recorded program, Cablevision transmits that program from its head-end to the subscriber's home, exactly as it would in fulfilling a request for VOD programming. *Id.* at 59a.

The complex network of equipment and software necessary to carry out this copying and transmission for the "RS-DVR" service is housed in a secure facility at Cablevision's head-end and is not accessible to subscribers. *Id.* at 52a-53a, 66a-67a. Cablevision employees must staff the "RS-DVR" system around the clock to operate and maintain it. *Id.* at 52a-53a.

The "RS-DVR" service can be used only for programming Cablevision supplies, and only for the particular copyrighted works Cablevision chooses to make available. *Id.* at 53a. In planning the service, Cablevision considered making available only a few channels, but eventually decided to make available all programming included in a given customer's cable subscription. *Id.* Unlike a VCR or other neutral copying device, the "RS-DVR" service does not allow subscribers to copy and replay programs other than what Cablevision chooses to supply, or to use copies in any manner other than over Cablevision's service. *Id.* at 67a-68a, 71a.

E. Proceedings Below

1. Petitioners are copyright owners of many of the most popular movies, series, and other programming available on television. They license that programming to Cablevision for its regular cable service (and, for some programs, its VOD service). *Id.* at 3a. When Cablevision announced in March 2006 its intent to offer "RS-DVR" service without obtaining licenses, Petitioners sued to block that unlicensed exploitation of their works. *Id.* at 60a. Because their complaint concerned Cablevision's own

infringing conduct, not the actions of Cablevision's subscribers, Petitioners asserted only direct infringement claims. Cablevision denied direct infringement, but stipulated it would not assert a fair use defense to a direct infringement claim. *Id.* at 61a.

2. The district court granted Petitioners' motion for summary judgment and enjoined Cablevision from using the "RS-DVR" service to reproduce or publicly perform Petitioners' copyrighted works without licenses. *Id.* at 80a. The court rejected Cablevision's primary argument that it is shielded from direct liability because its subscribers – not Cablevision itself – "do" the copying and performances by making requests to which Cablevision "automatically" responds. *Id.* at 70a-71a; *see also id.* at 76a. Examining all that Cablevision does to design and operate the service, maintain exclusive physical control of and access to the equipment, and select and supply the content available, the court ruled that the copying and public performances are "done . . . by Cablevision, albeit at the customer's request." *Id.* at 72a.

That conclusion was bolstered by the district court's holding that the buffer copying Cablevision performs prior to any customer request infringes the right to make "fixed" copies. Following the interpretation of "fixed" adopted by three Circuits and the Copyright Office, the court concluded that embodiments in the buffers are fixed because they permit reproduction of works into complete, permanent copies. *Id.* at 73a-74a.

Finally, the district court held that Cablevision performs Petitioners' works "publicly." Under the statutory language and established precedent, "a transmission 'to the public' is a public performance, even if members of the public receive the transmission at separate places at different times. Such is the case here." *Id.* at 77a.

3. The Second Circuit reversed, based on its understanding of the relationship between direct and secondary liability under this Court's *Sony* decision. The court noted that its "refusal to find Cablevision directly liable" was "buttressed by the existence and contours of the Supreme Court's doctrine of contributory liability in the copyright context." *Id.* at 24a. The court did "not believe that an RS-DVR customer is sufficiently distinguishable from a VCR user to impose liability as a direct infringer on [Cablevision] for copies that are made automatically upon that customer's command." *Id.* at 21a.

Proceeding from that premise, the Second Circuit held that Cablevision is not directly liable for making unauthorized copies of Petitioners' works. Purporting to apply a line of cases beginning with *Religious Technology Center v. Netcom On-Line Communications Services, Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995) ("*Netcom*"), the court focused on "the volitional conduct that causes the [specific] copy to be made." Pet. App. 20a. The Second Circuit concluded that the only "volitional conduct" that matters is a human being's decision to make a specific copy of a specific work. Therefore, the court found, "Cablevision's conduct in designing, housing, and maintaining a system that exists only to produce a copy" is insufficiently "volitional" for direct liability. *Id.*

Next, the court held that the buffer copies Cablevision admittedly makes are not "fixed" and therefore do not infringe Petitioners' reproduction right. *Id.* at 18a. To reach that conclusion, the court rejected the interpretation of the statute adopted by three other Circuits and the Copyright Office, adding an ill-defined "durational requirement" on top of the functional standard employed by prior decisions. *Id.* at 11a-13a, 15a-16a.

Turning to public performance, the Second Circuit reserved the question whether Cablevision "does" the performances for purposes of direct liability. *Id.* at 28a. The court held instead that the performances Cablevision transmits to its subscribers are not "public" – thereby eliminating the possibility of both direct *and* indirect liability. *Id.* The court adopted a novel test that requires different members of the public to receive the "same" transmission for a performance to be public. *E.g.*, *id.* at 30a-31a. The court did not explain how that reading could be reconciled with the statute's express coverage of transmissions "at different times." 17 U.S.C. § 101. It sought to distinguish on their facts contrary cases finding public performance when members of the public received separate transmissions, because the transmissions in those cases were generated from one copy, instead of the separate copies created and used by the "RS-DVR" service. Pet. App. 37a-40a.

4. After the mandate issued, Cablevision announced the launch of the "RS-DVR" service "early next year." Richard Bellamy, *Cablevision to Launch Network DVR*, Broadcasting & Cable, Sept. 12, 2008, *available at* http://www.broadcastingcable.com/article/CA6595928.html.

REASONS FOR GRANTING THE WRIT

There is a pressing need for review of the decision below. Although Petitioners challenge Cablevision's own conduct, the Second Circuit shifted the focus to the conduct of Cablevision's customers and treated this case as though *Sony* supplied the controlling rule. But *Sony* is inapposite. Cablevision operates a centralized service that supplies, copies, and transmits Petitioners' programs on request. That conduct is completely unlike Sony's one-time sale of an in-home copying device as an article of commerce. Indeed, in *Tasini* this Court rejected the notion that *Sony* provides a shield from direct liability for services that automatically respond to user requests for copyrighted works. 533 U.S. at 504. By ignoring *Tasini* and viewing this case through the lens of *Sony*, the Second Circuit inverted the longstanding relationship between direct and secondary copyright infringement and permitted Cablevision to piggyback on any defenses (such as fair use) its customers might have, contrary to well-settled law. As it has repeatedly done before, this Court should intervene now to correct that misreading of the Court's own precedent. *Cf. Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994) (correcting misreading of *Sony*'s fair-use holding); *Metro-Goldwyn-Mayer Studios Inc.*

v. Grokster, Inc., 545 U.S. 913 (2005) (correcting misreading of *Sony*'s "substantial noninfringing use" defense).

To make this case fit the *Sony* mold, the Second Circuit was forced to distort key elements of copyright law. The court adopted and expanded the so-called "*Netcom*" rule, interpreting it as a categorical exemption from direct liability for copying by computerized services that automatically carry out user requests. Such a rule allows commercial services to engineer around direct liability by replacing human employees with computers. Under the rule as applied below, all of Cablevision's conduct in designing, housing, and operating its service, and selecting and supplying the copyrighted works available through it, is simply irrelevant to whether it is a direct infringer that "does" the copying. This sweeping ruling raises one of the most important issues in copyright law today. Computerized systems that automatically respond to consumer requests are becoming the dominant mode for delivering copyrighted works to the public, yet the Second Circuit has insulated them from direct liability. Particularly in light of the conflict with *Tasini*, this Court's guidance is needed on this critical issue.

The Second Circuit also had to reject the standard uniformly adopted by other Circuits and the Copyright Office for whether buffer copies are "fixed." Cablevision's buffer copies (which it indisputably makes without user input) meet the functional standard for fixation that prior authorities have derived from the statutory language. But the Second Circuit imposed an additional, nebulous "durational requirement" for fixation, and held that Cablevision's buffers are noninfringing under that novel requirement. That ruling creating a circuit split was outcome determinative, and merits review in its own right.

The Second Circuit's ruling that Cablevision's performances are not "public" (and are therefore exempt from both direct *and* secondary liability) also calls out for review. The court's reasoning that a multitude of *separate* transmissions of the same program are by definition not public would eviscerate the public performance right by rendering all on-demand performances non-public. It flies in the face of the statutory language, which expressly encompasses performing a work by transmitting it "at different times." 17 U.S.C. § 101. Nor can that reasoning be squared with decisions from other Circuits adhering to the plain statutory language and holding that public performances may occur through separate transmissions. The Second Circuit cannot distinguish away this circuit conflict on the ground that Cablevision uses separate *copies* for its transmissions, because that *ad hoc* distinction has no basis in the statute. This Court – which has never addressed the scope of the public performance right under the 1976 Act – should resolve the conflict and restore the plain meaning of the law.

These glaring errors cannot be left in place while these fundamental issues "percolate." The stakes are simply too high, and the potential harms too severe.

The multiple errors below will begin right now to affect the development of industries delivering content to users, resulting in a host of new automated services that will become entrenched and extremely hard to dislodge if this Court disagrees with the Second Circuit years hence. These unlicensed services will undermine past and future investments in licensed services and severely erode the value of copyrights in the new era when creative works are delivered to consumers automatically and on demand. That, in turn, will undermine copyright's core function of providing an "engine of free expression" by "suppl[ying] the economic incentive to create and disseminate ideas." *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003) (quotation marks omitted).

I. This Case Presents Critically Important Questions About the Application of Copyright Law to Automated Delivery of Copyrighted Content.

The Second Circuit's decision undermines the very foundations of copyright law as it applies to computerized services that are reshaping how the public receives and consumes copyrighted works. As shown *infra*, each of the Second Circuit's individual holdings absolving Cablevision of responsibility for unauthorized copying and public performance rests on a serious misreading of copyright law that conflicts with other authorities and independently merits review. But the core problem goes much deeper. Misreading *Sony*, and ignoring *Tasini*, the

Second Circuit distorted the entire framework of copyright law.

1. Through its "RS-DVR" service, Cablevision takes copyrighted programs it has licensed for real-time transmissions and exploits them in an additional *unlicensed* way for profit. Such unauthorized commercial exploitation lies at the very heartland of direct copyright infringement. But the Second Circuit assessed Cablevision's responsibility based not on its own conduct, but on that of its customers, and therefore treated this case as just like *Sony*. *E.g.*, Pet. App. 21a (court did "not believe that an RS-DVR customer is sufficiently distinguishable from a VCR user to impose liability as a direct infringer on [Cablevision]").[4] Mapping this case onto *Sony*, the court ruled that copies of Petitioners' programs are made solely by

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[4] In so ruling, the Second Circuit assumed that either the subscriber or Cablevision could be a direct infringer, but not both. That conflicts with prior cases. *E.g.*, *RCA/Ariola Int'l, Inc. v. Thomas & Grayston Co.*, 845 F.2d 773, 781 (8th Cir. 1988) (holding that retailers as well as customers are directly liable for making copies on retailers' premises); *Harbor Motor Co. v. Arnell Chevrolet-Geo, Inc.*, 265 F.3d 638, 643-45 (7th Cir. 2001) (holding that newspaper and advertiser could both be directly liable for infringing advertisement); *see also Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 157 (1975) ("An orchestra . . . [that] performs a copyrighted musical composition . . . without a license is thus clearly an infringer . . . . The entrepreneur who sponsors such a public performance . . . is also an infringer – direct or contributory.").

Cablevision's subscribers, who then view them in purely private performances.

But the conduct of Cablevision itself is completely unlike that of the manufacturer and seller of a VCR. In *Sony*, it was undisputed that the defendant was not a direct infringer, because its only link to infringing conduct "occurred at the moment of sale" of a product. 464 U.S. at 438; *see also id.* at 440 (claim "predicated entirely on the sale of an article of commerce"). Hence, *Sony* did not address where the line between direct and secondary infringement lies – much less suggest that a company like Cablevision, which selects, supplies, copies, and performs copyrighted works, is immune from direct liability for copying and from all liability for public performance.[5]

The Second Circuit's approach conflicts with well-settled law. As the en banc Sixth Circuit explained, when a commercial defendant is charged with direct infringement, it is *irrelevant* whether "it would be fair use for [its customers] to make their own copies," because "[t]he courts have . . . properly rejected attempts by for-profit users to stand in the shoes of their customers." *Princeton Univ. Press v. Mich. Document Servs., Inc.*, 99 F.3d 1381, 1389 (6th Cir. 1996) (en banc) (quotation marks omitted).

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[5] It is no accident that the conduct of the customers is similar in both cases because, like the time-shifting at issue in *Sony*, commercial on-demand delivery of copyrighted content allows consumers to view programs when they want them. The critical difference lies in what the commercial supplier does. Congress intended the exclusive rights of copyright owners to cover commercial on-demand services, and *Sony*'s holding that certain in-home time-shifting is fair use did not override that congressional intent.

The Second Circuit, however, has let Cablevision "stand in the shoes of [its] customers." Because secondary liability is purely derivative and thus requires proof of direct infringement by customers, *Sony*, 464 U.S. at 434, any customer fair use defense would also be a defense to a secondary liability claim against Cablevision. Hence, by holding that Cablevision could be liable only as a secondary infringer (if at all), the decision below allows Cablevision to piggyback on any fair use defense its subscribers might have, contrary to the settled law reaffirmed in *Princeton*. In addition, secondary liability requires proof of elements like knowledge, intent, and financial interest, *Grokster*, 545 U.S. at 930, which are irrelevant to direct infringement as a strict-liability tort. Thus, the Second Circuit was wrong in saying that "contributory liability stands ready to provide adequate protection to copyrighted works" where – as here – courts "construe the boundaries of direct liability [too] narrowly." Pet. App. 24a.

2. The Second Circuit's misreading of *Sony* also conflicts with this Court's decision in *Tasini*. That case involved a computerized database that made and distributed copies of newspaper articles when users of the service requested them. Exactly as here, the database operators "invoke[d] *Sony*" and argued that they "could be liable only under a theory of

contributory infringement, based on end-user conduct, which the [plaintiffs] did not plead." *Tasini*, 533 U.S. at 504. Flatly rejecting that attempt to foist responsibility onto consumers, the Court held the database operator directly liable for its copying and distribution via an automated system. *Id.*

Inexplicably, the Second Circuit ignored *Tasini* altogether. Indeed, its ruling could have been lifted from the *dissent* in that case. *Compare* Pet. App. 26a-27a ("copies produced by the RS-DVR system are 'made' by the RS-DVR customer, and Cablevision's contribution to this reproduction by providing the system does not warrant the imposition of direct liability"), *with* 533 U.S. at 518 & n.14 (Stevens, J., dissenting) (reasoning that under *Sony* "it would be more accurate to say that [the database service] makes it possible for users to make and distribute copies").

3. Review of the Second Circuit's decision is needed now because of the profound real-world consequences it threatens. The implications of the Second Circuit's attempt to turn the indirect-liability exception into the rule by shifting the focus of copyright law onto consumers, while treating commercial intermediaries as presumptively immune from direct liability, go far beyond this case. Indeed, if that decision is not reviewed and corrected by this Court, it will fundamentally distort how the exploding market for automated services develops. *See* Brian Stelter, *A Ruling May Pave the Way for Broader Use of DVR*, N.Y. Times, Aug. 5, 2008, at C8 (analyst observing that Second Circuit's decision has

"seismic implications across the media landscape"). The result will be an "installed base" of unlicensed Cablevision-like services that will drive legitimate competitors who pay license fees out of the market and prove almost impossible to eradicate after the fact.

This case is thus on a par with *Sony*, *Tasini*, and *Grokster* in terms of its significance to the development of new markets and technologies. In each case, the lower court decision had the potential to determine whether copyright owners should be compensated for new uses of their works that advances in technology made possible. In each case, this Court intervened because the consequences were important enough that the Court should determine the national rule. The stakes here are equally high. Most of the nation's major video content providers are Petitioners. The case has been closely watched by content owners and service providers alike, and there was widespread *amicus* participation from interested parties on all sides in the Second Circuit – in recognition that this case will set a standard for copyright protection in the marketplace of automated access to and delivery of copyrighted works. This is manifestly a situation in which this Court should have the final say.

II. The Second Circuit's Reproduction Rulings Merit Review.

To implement its misguided notion that this case is just like *Sony*, the Second Circuit had to distort basic rules of copyright law to shield Cablevision from direct liability for infringing Petitioners' exclusive reproduction rights. The court adopted a categorical exemption for operators of computerized services from direct liability when they automatically carry out user requests to make copies. And the court ruled that Cablevision's buffer copies are not "fixed" and thus not infringing, creating a conflict with the uniform interpretation of other Circuits and the Copyright Office. Both rulings merit review in their own right.

A. The Second Circuit's Categorical Exemption from Direct Liability for Automated Services Presents a Question of Singular Importance.

The Second Circuit's decision to exonerate Cablevision for the unauthorized copying of Petitioners' works raises an exceedingly important issue: whether operators of computerized services that automatically copy works when requested by users are ever directly liable for that infringement. The decision below adopted a sweeping categorical exemption from direct liability for such services. That exemption will eviscerate the exclusive right of authors to reproduce their creative works as human employees are increasingly replaced by computerized on-demand services.

The Copyright Act gives an author "the exclusive rights to do and to authorize" several things, including "to reproduce the copyrighted work in copies." 17 U.S.C. § 106(1). A direct infringer is "[a]nyone who violates any of the exclusive rights of the copyright owner." *Id.* § 501(a). Under any common understanding of this statutory language, Cablevision directly infringes ("violates") the exclusive right "to do and to authorize" the reproductions of Petitioners' works. Cablevision itself designed and operates the service, maintains exclusive physical control of and access to the equipment through which it operates, and selects and supplies the content that subscribers may request for on-demand recording and performances. As the district court recognized, the copying is "done . . . by Cablevision, albeit at the customer's request." Pet. App. 72a. Indeed, as explained above, in *Tasini* this Court flatly rejected the notion that computerized systems are immune from direct liability when they automatically copy works in response to user requests. *See supra* at 21-22.

The Second Circuit set aside all of "Cablevision's conduct in designing, housing, and maintaining a system that exists only to produce a copy" as irrelevant, because it believed the only conduct sufficient to trigger direct liability is "volitional conduct" by a "human employee" at the moment when a subscriber selects a particular program for permanent copying. Pet. App. 20a, 22a. That holding ignores the reality that human employees engage in "volitional conduct" in designing and operating this service under the direction of Cablevision's human management.

The court did not explain how its ruling could be squared with the statute's broad, non-technical phrase – "to do and to authorize" – or with *Tasini*. Instead, building on its misreading of *Sony*, the court invoked a line of cases addressing direct liability for incidental copying over the Internet, starting with the district court decision in *Netcom*. Pet. App. 19a. *Netcom* addressed the potential liability of an Internet Service Provider ("ISP") whose servers temporarily hosted user-supplied copyrighted material in the course of providing basic Internet facilities. Against that backdrop, *Netcom* opined that "[a]lthough copyright is a strict liability statute, there should still be *some element of volition or causation*" for direct liability. 907 F. Supp. at 1370 (emphasis added). Thus, the *Netcom* decision excluded only purely involuntary or incidental involvement with copying from the scope of direct liability in a situation where a subscriber uploaded a file to his ISP that was then automatically transferred to another ISP. *Id.* at 1368-69 (concluding that "the mere fact that Netcom's system incidentally makes temporary copies of plaintiffs' works does not mean Netcom has caused the copying").

In 1998, Congress enacted the Online Copyright Infringement Liability Limitation Act, 17 U.S.C. § 512, to address the issue that had troubled the *Netcom* court by crafting carefully circumscribed safe-harbors from copyright liability for ISPs. Those safe-harbors extend only to ISPs – not non-Internet services like Cablevision's "RS-DVR" – and only cover four specific aspects of basic Internet functionality, none of which involve actively exploiting copyrighted content. *Id.* § 512(a)-(d). Even then, the ISP must meet additional requirements to qualify for the safe-harbors, such as terminating repeat infringers and appropriately responding to notices of infringing conduct. *Id.*

§ 512(a)-(d), (i)(1)(A). If automated services were immune from direct liability when they automatically respond to user requests, there would have been no need for Congress to create very narrow and highly qualified ISP safe-harbors under these circumstances.

Nonetheless, the so-called *Netcom* rule has acquired a life of its own in the lower courts, unmoored from any statutory grounding, and without the limitations of § 512. In *CoStar Group, Inc. v. LoopNet, Inc.*, 373 F.3d 544 (4th Cir. 2004), for example, the Fourth Circuit held that *Netcom* precludes direct liability for a website that copies and displays infringing photographs submitted by its customers. *CoStar* granted this immunity even though the website's employees reviewed each photograph before it was displayed on the site. *Id.* at 555-56.

Now the Second Circuit has expanded *Netcom* in another direction, to immunize a closed on-demand system in which customers must choose among specific copyrighted works supplied to them by Cablevision itself. In *Netcom*, the openness of the Internet and the fact that the ISP had no role in supplying the copyrighted content weighed heavily against direct liability. 907 F. Supp. at 1372-73. Here, in contrast, Cablevision has complete discretion in selecting which copyrighted programs subscribers may choose for copying. Cablevision maintains control over the copies and allows subscribers to access them only using Cablevision's service. Yet, despite acknowledging that

Cablevision's conduct "is indeed more proximate to the creation of illegal copying than, say, operating an ISP or opening a copy shop, where all content was supplied by the customers themselves or other third parties," Pet. App. 23a, the Second Circuit still held that the only conduct that counts is "volitional" conduct by a human being at one specific point in the process: when a customer selects from among the programs supplied by Cablevision. *Id.* at 22a.

As the Second Circuit's analysis exemplifies, lower courts are treating *Netcom* as if it were a decision of this Court (while ignoring *Tasini*) and then extrapolating a growing loophole in copyright law from it. *Netcom's* context-sensitive holding is thereby expanding into a blanket immunity for all businesses that employ computers instead of humans to carry out customer requests for unauthorized copies – without the careful limitations enacted by Congress in § 512. Without any guidance from this Court, the legal landscape is largely being defined by the spread of that judge-made rule at the very time when automated delivery of copyrighted works is skyrocketing, both on the Internet and on closed services like Cablevision's.

To be sure, not every court has followed suit. The Fifth Circuit refused to recognize a categorical *Netcom* rule to immunize an on-demand Internet service from direct liability in an unpublished decision. *Playboy Enterprises, Inc. v. Webbworld, Inc.*, 991 F. Supp. 543 (N.D. Tex. 1997), *aff'd*, 168 F.3d 486 (5th Cir. 1999) (unpublished table decision) (affirming on grounds stated in district court opinion). The defendant service was held liable as a direct infringer in light of the totality of its conduct, including its discretion in selecting content available for copying. 991 F. Supp. at 552-53 ("Webbworld cannot now evade liability by claiming helplessness in the face of its 'automatic' operation."). The existence of this divergent authority highlights the need for review of this fundamentally important question.

B. The Second Circuit's Buffer-Copy Holding Creates a Conflict with Other Circuits and the Copyright Office.

To exempt Cablevision from direct liability, the Second Circuit also had to rule that the buffer copies Cablevision itself admittedly creates are not "fixed" and thus are noninfringing. Pet. App. 18a. That ruling conflicts with the standard employed by other Circuits and the Copyright Office.[6]

In deciding whether temporary buffer copies are "fixed," prior cases have uniformly adopted the standard derived from the statutory definition in *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993). There the defendant argued that buffer copies loaded into random access memory ("RAM") were not "fixed" because they were temporary. Rejecting that argument, the Ninth Circuit held that all that is required to satisfy the statutory definition of "fixed" is that the embodiment be "*sufficiently* permanent or stable to *permit* [the work] to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." 17 U.S.C. § 101 (emphasis added); *see MAI*, 991 F.2d at 519 ("since we find that the copy created in the RAM can be 'perceived, reproduced, or otherwise communicated,' we hold that the loading of software into the RAM creates a copy under the Copyright Act").

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[6] Of course, even if the buffer copies were not themselves "fixed" copies, they are indisputably the first steps in making permanent copies when requested by subscribers, and Cablevision carries out these steps with no user input. *Supra* at 9-10. But the Second Circuit ignored Cablevision's unilateral buffering conduct in holding that Cablevision does not directly infringe when it carries out subscriber requests for permanent copies.

Under *MAI*'s definition, a work is "fixed" so long as its embodiment endures long enough (or in the statutory language, is "sufficiently permanent or stable") to permit the work's perception, reproduction, or communication. *MAI*, 991 F.2d at 517-18; *see also* Jane C. Ginsburg, *Putting Cars on the "Information Superhighway,"* 95 Colum. L. Rev. 1466, 1476 n.39 (1995). Two other circuits have adopted *MAI*'s reading. *See Stenograph L.L.C. v. Bossard Assocs., Inc.*, 144 F.3d 96, 101-02 (D.C. Cir. 1998); *Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc.*, 421 F.3d 1307, 1311 (Fed. Cir. 2005).

The Copyright Office also adopted the *MAI* reading in a congressionally mandated report issued after notice and comment. U.S. Copyright Office, *DMCA Section 104 Report* (Aug. 2001), *available at* http://www.copyright.gov/reports/studies/dmca/sec-

104-report-vol-1.pdf. Like the Ninth Circuit, the Copyright Office drew a "dividing line . . . between reproductions that exist for a sufficient period of time to be capable of being 'perceived, reproduced, or otherwise communicated,' and those that do not." *Id.* at 111. It also rejected the notion of an independent requirement that the embodiment exist for some arbitrary additional period of time. *Id.* at 113.

The Second Circuit, however, added an extra requirement beyond what *MAI* requires. First, "the work must be embodied in a medium, i.e., placed in a medium such that it can be perceived, reproduced, etc., from that medium." Pet. App. 11a. That is the very same requirement adopted by *MAI* – and Cablevision's buffer copies indisputably meet *this* requirement. *Id.* at 16a. Thus, if the Second Circuit had adopted the *MAI* standard, it would necessarily have concluded that Cablevision's buffers are "fixed."

But the Second Circuit grafted on a second requirement: the work "must remain thus embodied 'for a period of more than transitory duration.'" *Id.* at 11a. And the court held that Cablevision's buffers fail that novel requirement, because "[n]o bit of data remains in [the] buffer for more than a fleeting 1.2 seconds." *Id.* at 17a. Of course, 1.2 seconds is not "fleeting" for a computer. With twenty-first century technology, buffering for 1.2 seconds is sufficient to permit reproduction of the works in permanent copies – the standard *MAI* derived from the statutory language.

Thus, the court's ruling that Cablevision's buffer copies are not "fixed" flows directly from its departure from the test adopted by all prior authorities. The Second Circuit recognized as much when it acknowledged that it was rejecting the Copyright Office's reading, Pet. App. 16a (court "not persuaded" by interpretation) – which is identical to the reading adopted by *MAI* and two other Circuit courts.

Moreover, the Second Circuit's ruling rests on an obvious misreading of the statute, which defines a copy as "fixed" "when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." 17 U.S.C. § 101. The court assumed the phrase "for a period of more than transitory duration" modifies the word "embodiment" – from which it is separated by several lines of text – instead of the immediate series of antecedents "perceived, reproduced, or otherwise communicated." That strained reading conflicts with ordinary usage and canons of statutory construction. Modifiers almost always modify the words immediately adjacent to them. *See Jama v. Immigration & Customs Enforcement*, 543 U.S. 335, 344 & n.4 (2005). It would have been easy for Congress to draft a statute stating that the "embodiment" must exist "for a period of more than transitory duration," but it did not do so. The Second Circuit's outcome-determinative adoption of that reading in conflict with other Circuits plainly merits review.

III. The Second Circuit's Holding That Cablevision Does Not "Publicly" Perform Petitioners' Works Conflicts with the Plain Statutory Language and Prior Circuit Decisions.

The Second Circuit also adopted an unsupportable interpretation of the public performance right to justify its conclusion that performances of Petitioners' works over Cablevision's "RS-DVR" service are (like time-shifting in *Sony*) purely private. That reading conflicts with the plain statutory language and decisions applying it. It also sets forth a blueprint for providers of on-demand services to design their systems to evade copyright liability, even as they profit from delivery of unauthorized performances to thousands or millions of subscribers.

1. The plain language of the Copyright Act leaves no doubt that separate on-demand transmissions of a performance to thousands of subscribers at different times constitute a "public" performance. To perform a work "publicly" means, *inter alia*, "to transmit or otherwise communicate a performance . . . of the work . . . to the public, by means of any device or process, whether the members of the public capable of receiving the performance . . . receive it . . . at the same time or at different times." 17 U.S.C. § 101 ("transmit clause"). That definition plainly encompasses a performance completed via separate, non-simultaneous transmissions to individual customers who receive the performance on demand. Jane C. Ginsburg, *Can Copyright Become User-Friendly?*, 25 Colum. J.L. & Arts 71, 83 (2001) ("an

on demand audio- or videostream of a work falls squarely within the definition of a 'public performance or display'").[7]

Prior to the decision below, every court to consider on-demand performances via separate transmissions held that they infringe the public performance right. In *Columbia Pictures Industries, Inc. v. Redd Horne, Inc.*, 749 F.2d 154, 159 (3d Cir. 1984), for example, the Third Circuit held that a video rental store publicly performed videos when it transmitted the recorded works to private viewing booths upon request — even though only one or two people could view each separate transmission of a video. *Id.*; *see also, e.g.*, *Columbia Pictures Indus., Inc. v. Prof. Real Estate Investors, Inc.*, 866 F.2d 278, 282 nn.6-7 (9th Cir. 1989) (public performance by hotel that separately transmits works to individual hotel rooms on request); *On Command Video Corp. v. Columbia Pictures Indus.*, 777 F. Supp. 787, 790 (N.D. Cal. 1991) (same); *Video Pipeline, Inc. v. Buena Vista Home Enter., Inc.*, 192 F. Supp. 2d 321, 332 (D.N.J. 2002) (Internet streaming of videos "to individual computers" "constitute[s] a public performance"), *aff'd*, 342 F.3d 191 (3d Cir. 2003).

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[7] That is confirmed by another section of the Copyright Act providing that "interactive services" that engage in the "performance of a sound recording publicly" must negotiate licenses to do so. 17 U.S.C. § 114(d)(3)(A). "Interactive services" are those that "enable[ ] *a member* of the public to receive . . . on request, a transmission of a particular sound recording." *Id.* § 114(j)(7) (emphasis added). Thus, the Act consistently treats on-demand transmissions to individual members of the public as public performances.

The Second Circuit departed from the plain statutory language and all prior case law. It reasoned that a performance is not public if individuals receive it via separate transmissions. The court thought that "the transmit clause directs us to identify the potential audience of a given transmission, i.e., the persons 'capable of receiving' it, to determine whether that transmission is made 'to the public.'" Pet. App. 41a; *see also id.* at 34a ("when Congress speaks of transmitting a performance to the public, it refers to the performance created by the act of transmission"). On this view, the fact that Cablevision transmits an identical performance to thousands of paying subscribers is irrelevant. Each particular point-to-point transmission must be examined separately in determining whether a performance is public. And because each "particular transmission," Pet. App. 30a, runs from Cablevision solely to one subscriber, its performances are, in the Second Circuit's view, private.

That reasoning is irreconcilable with *Redd Horne* and the other cases cited above, which hold that *performance* of a work is public even if it is received by each individual recipient via separate *transmissions*. Thus, the Second Circuit's "conclusion that, under the transmit clause, we must examine the potential audience of a given transmission . . . to determine whether that transmission is 'to the public,'" Pet. App. 36a, creates a Circuit conflict.

To paper over that conflict, the Second Circuit tried to distinguish *Redd Horne* on its facts by narrowing its own holding to apply only where the separate transmissions of a work are generated from separate copies of the work. Pet. App. 37a-38a. But that logical *non sequitur* should not succeed in insulating the Second Circuit's decision from review, because it is completely unmoored from the statute Congress enacted. The Act's definition of public performance does not mention copies at all, much less the number of copies used to generate transmissions of a performance.[8] By piling the number of copies on top of the number of transmissions as defining criteria of a public performance, the Second Circuit's reading moved beyond any plausible construction of the statutory text. Indeed, Congress provided that a public performance may be accomplished "by means of any device or process." 17 U.S.C. § 101. Transmitting a work to the public by first making separate copies for each recipient and then generating transmissions from each copy is still transmission "by means of any . . . process."

2. The Second Circuit's tortured reading of the public performance right will have profoundly destabilizing effects on the emerging marketplace for

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[8] Indeed, a public performance can take place without the use of any copies – for example, when an opera is broadcast live over the radio.

services that perform works on demand. By focusing on the public or private nature of each "particular transmission," the Second Circuit threatens to place every on-demand service outside the scope of the public performance right. And even when the holding below is limited to services in which each transmission originates from a "distinct" copy, on-demand services will simply adopt the same "copy then play" two-step used by Cablevision. When a customer wants to view an on-demand program, she will simply send an electronic request first to "copy" and then to "play" the desired work. The service will make a unique copy of the work as an automatic response to the request, and transmit the program from that unique copy. Under the decision below, that requires no license, because the service provider is not directly liable for the automated copying, *see supra* Part II.A, and is not liable at all for the transmission made from the separate copy.

The scope of the Second Circuit's holding goes far beyond cable systems and includes the Internet or any other method of transmitting performances on demand. Any company with a digital copy of a work can readily avail itself of this gaping loophole. Copyright owners and others who have invested substantially in developing and licensing innovative automated offerings in reliance on settled law are at risk of having this investment undercut by the unlicensed services approved by the Second Circuit.

The decision will also distort technological innovation. Rather than requiring engineers to create more efficient ways to deliver content on demand, companies will ask their lawyers to develop more creative ways to skirt the copyright laws. Multiple copies will be used by on-demand services, even when a single copy is more efficient, whenever the cost of the additional server space is less than the cost of negotiating and paying for a license. The result will be to undermine the incentive to invest in creative works and reward the use of inefficient technology.

The Second Circuit's only response is to note — apparently without intended irony — that copyright owners can enforce their exclusive reproduction right against services that make multiple copies to support their "copy then play" services. Pet. App. 37a. As discussed above, in the same opinion the court provided a roadmap for evading liability for making reproductions as well.

3. While the effect of the decision below goes far beyond cable television, review is appropriate here for the additional reason that the Second Circuit has blessed Cablevision's end run around the limitations of its § 111 license for secondary cable transmission of broadcast television. 17 U.S.C. § 111(c), (f). Congress included both the "transmit" clause of the public performance definition and the § 111 statutory license in the 1976 Act in response to this Court's decisions in *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1968), and *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*, 415 U.S. 394 (1974), which had held that cable transmissions do not infringe the public performance right under pre-1976 legislation. *See*

WGN, 693 F.2d at 624 (recounting history). The 1976 Act clarified that the public performance right encompasses cable transmissions, and granted cable companies a statutory license for *simultaneous* retransmission of broadcast television. The self-evident purpose of this legislation was to require cable companies to negotiate licenses for all other transmission of copyrighted programming – and in particular, for delayed programming. But that is exactly what the Second Circuit has now said Cablevision may do without obtaining a license.

This Court has never revisited the scope of the public performance right since the 1976 Act overturned *Fortnightly* and *Teleprompter*. Now, 34 years after *Teleprompter*, in the face of another decision exempting a cable company from licensing obligations, there is an urgent need for the Court's guidance concerning this issue, particularly in light of the other compelling questions presented by this case.

CONCLUSION

The petition for a writ of certiorari should be granted.

Appendix A

United States Court of Appeals, Second Circuit.

The CARTOON NETWORK LP, LLLP and Cable
News Network L.P., L.L.L.P., Plaintiffs-Counter-Claimants-Defendants-Appellees,
Twentieth Century Fox Film Corporation, Universal
City Studios Productions LLLP, Paramount Pictures
Corporation, Disney Enterprises Inc., CBS
Broadcasting Inc., American Broadcasting
Companies, Inc., NBC Studios, Inc., Plaintiffs-Counter-Defendants-Appellees,
v.
CSC HOLDINGS, INC. and Cablevision Systems
Corporation, Defendants-Counterclaim-Plaintiffs-Third-Party Plaintiffs-Appellants,
v.
Turner Broadcasting System, Inc., Cable News
Network LP, LLP, Turner Network Sales, Inc.,
Turner Classic Movies, L.P., LLLP, Turner Network
Television LP, LLLP, Third-Party-Defendants-Appellees.

Docket Nos. 07-1480-cv(L), 07-1511-cv(CON).

Argued: Oct. 24, 2007.
Decided: Aug. 4, 2008.

Before: WALKER, SACK, and LIVINGSTON, Circuit Judges.

JOHN M. WALKER, JR., Circuit Judge:

Defendant-Appellant Cablevision Systems Corporation ("Cablevision") wants to market a new "Remote Storage" Digital Video Recorder system ("RS-DVR"), using a technology akin to both traditional, set-top digital video recorders, like TiVo ("DVRs"), and the video-on-demand ("VOD") services provided by many cable companies. Plaintiffs-Appellees produce copyrighted movies and television programs that they provide to Cablevision pursuant to numerous licensing agreements. They contend that Cablevision, through the operation of its RS-DVR system as proposed, would directly infringe their copyrights both by making unauthorized reproductions, and by engaging in public performances, of their copyrighted works. The material facts are not in dispute. Because we conclude that Cablevision would not directly infringe plaintiffs' rights under the Copyright Act by offering its RS-DVR system to consumers, we reverse the district court's award of summary judgment to plaintiffs, and we vacate its injunction against Cablevision.

BACKGROUND

Today's television viewers increasingly use digital video recorders ("DVRs") instead of video cassette recorders ("VCRs") to record television programs and play them back later at their convenience. DVRs generally store recorded programming on an internal hard drive rather than a cassette. But, as this case demonstrates, the generic term "DVR" actually refers to a growing number of different devices and systems. Companies like TiVo sell a stand-alone DVR device that is typically connected to a user's cable box and television much like a VCR. Many cable companies also lease to their subscribers "set-top storage DVRs," which combine many of the functions of a standard cable box and a stand-alone DVR in a single device.

In March 2006, Cablevision, an operator of cable television systems, announced the advent of its new "Remote Storage DVR System." As designed, the RS-DVR allows Cablevision customers who do not have a stand-alone DVR to record cable programming on central hard drives housed and maintained by Cablevision at a "remote" location. RS-DVR customers may then receive playback of those programs through their home television sets, using only a remote control and a standard cable box equipped with the RS-DVR software. Cablevision notified its content providers, including plaintiffs, of its plans to offer RS-DVR, but it did not seek any license from them to operate or sell the RS-DVR.

Plaintiffs, which hold the copyrights to numerous movies and television programs, sued Cablevision for declaratory and injunctive relief. They alleged that Cablevision's proposed operation of the RS-DVR would directly infringe their exclusive rights to both reproduce and publicly perform their copyrighted works. Critically for our analysis here, plaintiffs alleged theories only of direct infringement, not contributory infringement, and defendants waived any defense based on fair use.

Ultimately, the United States District Court for the Southern District of New York (Denny Chin, *Judge*), awarded summary judgment to the plaintiffs and enjoined Cablevision from operating the RS-DVR system without licenses from its content providers. *See Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp.* (*Cablevision I*), 478 F. Supp. 2d 607 (S.D.N.Y. 2007). At the outset, we think it helpful to an understanding of our decision to describe, in greater detail, both the RS-DVR and the district court's opinion.

I. Operation of the RS-DVR System

Cable companies like Cablevision aggregate television programming from a wide variety of "content providers"-the various broadcast and cable channels that produce or provide individual programs-and transmit those programs into the homes of their subscribers via coaxial cable. At the outset of the transmission process, Cablevision gathers the content of the various television channels into a single stream of data. Generally, this stream is processed and transmitted to Cablevision's customers in real time. Thus, if a Cartoon Network program is scheduled to air Monday night at 8pm, Cartoon Network transmits that program's data to Cablevision and other cable companies nationwide at that time, and the cable companies immediately re-transmit the data to customers who subscribe to that channel.

Under the new RS-DVR, this single stream of data is split into two streams. The first is routed immediately to customers as before. The second stream flows into a device called the Broadband Media Router ("BMR"), *id.* at 613, which buffers the data stream, reformats it, and sends it to the "Arroyo Server," which consists, in relevant part, of two data buffers and a number of high-capacity hard disks. The entire stream of data moves to the first buffer (the "primary ingest buffer"), at which point the server automatically inquires as to whether any customers want to record any of that programming. If a customer has requested a particular program, the data for that program move from the primary buffer into a secondary buffer, and then onto a portion of one of the hard disks allocated to that customer. As new data flow into the primary buffer, they overwrite a corresponding quantity of data already on the buffer. The primary ingest buffer holds no more than 0.1 seconds of each channel's programming at any moment. Thus, every tenth of a second, the data residing on this buffer are automatically erased and replaced. The data buffer in the BMR holds no more than 1.2 seconds of programming at any time. While buffering occurs at other points in the operation of the RS-DVR, only the BMR buffer and the primary ingest buffer are utilized absent any request from an individual subscriber.

As the district court observed, "the RS-DVR is not a single piece of equipment," but rather "a complex system requiring numerous computers, processes, networks of cables, and facilities staffed by personnel twenty-four hours a day and seven days a week." *Id.* at 612. To the customer, however, the processes of recording and playback on the RS-DVR are similar to that of a standard set-top DVR. Using a remote control, the customer can record programming by selecting a program in advance from an on-screen guide, or by pressing the record button while viewing a given program. A customer cannot, however, record the earlier portion of a program once it has begun. To begin playback, the customer selects the show from an on-screen list of previously recorded programs. *See id.* at 614-16. The principal difference in operation is that, instead of sending signals from the remote to an on-set box, the viewer sends signals from the remote, through the cable, to the Arroyo Server at Cablevision's central facility. *See id.* In this respect, RS-DVR more closely resembles a VOD service, whereby a cable subscriber uses his remote and cable box to request transmission of content, such as a movie, stored on computers at the cable company's facility. *Id.* at 612. But unlike a VOD service, RS-DVR users can only play content that they previously requested to be recorded.

Cablevision has some control over the content available for recording: a customer can only record programs on the channels offered by Cablevision (assuming he subscribes to them). Cablevision can also modify the system to limit the number of channels available and considered doing so during development of the RS-DVR. *Id.* at 613.

II. The District Court's Decision

In the district court, plaintiffs successfully argued that Cablevision's proposed system would directly infringe their copyrights in three ways. First, by briefly storing data in the primary ingest buffer and other data buffers integral to the function of the RS-DVR, Cablevision would make copies of protected works and thereby directly infringe plaintiffs' exclusive right of reproduction under the Copyright Act. Second, by copying programs onto the Arroyo Server hard disks (the "playback copies"), Cablevision would again directly infringe the reproduction right. And third, by transmitting the data from the Arroyo Server hard disks to its RS-DVR customers in response to a "playback" request, Cablevision would directly infringe plaintiffs' exclusive right of public performance. *See id.* at 617. Agreeing with all three arguments, the district court awarded summary declaratory judgment to plaintiffs and enjoined Cablevision from operating the RS-DVR system without obtaining licenses from the plaintiff copyright holders.

As to the buffer data, the district court rejected defendants' arguments 1) that the data were not "fixed" and therefore were not "copies" as defined in the Copyright Act, and 2) that any buffer copying was de minimis because the buffers stored only small amounts of data for very short periods of time. In rejecting the latter argument, the district court noted that the "aggregate effect of the buffering" was to reproduce the entirety of Cablevision's programming, and such copying "can hardly be called de minimis." *Id.* at 621.

On the issue of whether creation of the playback copies made Cablevision liable for direct infringement, the parties and the district court agreed that the dispositive question was "*who* makes the copies"? *Id.* at 617. Emphasizing Cablevision's "unfettered discretion" over the content available for recording, its ownership and maintenance of the RS-DVR components, and its "continuing relationship" with its RS-DVR customers, the district court concluded that "the copying of programming to the RS-DVR's Arroyo servers ... would be done not by the customer but by Cablevision, albeit at the customer's request." *Id.* at 618, 620, 621.

Finally, as to the public performance right, Cablevision conceded that, during the playback, "the streaming of recorded programming in response to a customer's request is a performance." *Id.* at 622. Cablevision contended, however, that the work was performed not by Cablevision, but by the customer, an argument the district court rejected "for the same reasons that [it] reject[ed] the argument that the customer is 'doing' the copying involved in the RS-DVR." *Id.* Cablevision also argued that such a playback transmission was not "to the public," and therefore not a public performance as defined in the Copyright Act, because it "emanates from a distinct copy of a program uniquely associated with one customer's set-top box and intended for that customer's exclusive viewing in his or her home." *Id.*

The district court disagreed, noting that "Cablevision would transmit *the same program* to members of the public, who may receive the performance at different times, depending on whether they view the program in real time or at a later time as an RS-DVR playback." *Id.* at 623 (emphasis added). The district court also relied on a case from the Northern District of California, *On Command Video Corp. v. Columbia Pictures Industries,* 777 F. Supp. 787 (N.D. Cal. 1991), which held that when the relationship between the transmitter and the audience of a performance is commercial, the transmission is "to the public," *see Cablevision I,* 478 F. Supp. 2d at 623 (citing *On Command,* 777 F. Supp. at 790).

Finding that the operation of the RS-DVR would infringe plaintiffs' copyrights, the district court awarded summary judgment to plaintiffs and enjoined Cablevision from copying or publicly performing plaintiffs' copyrighted works "in connection with its proposed RS-DVR system," unless it obtained the necessary licenses. *Cablevision I,* 478 F. Supp. 2d at 624. Cablevision appealed.

DISCUSSION

We review a district court's grant of summary judgment de novo. *Bill Graham Archives v. Dorling Kindersley Ltd.,* 448 F.3d 605, 607 (2d Cir. 2006).

"Section 106 of the Copyright Act grants copyright holders a bundle of exclusive rights...."*Id.* at 607-08. This case implicates two of those rights: the right "to reproduce the copyrighted work in copies," and the right "to perform the copyrighted work publicly." 17 U.S.C. § 106(1), (4). As discussed above, the district court found that Cablevision infringed the first right by 1) buffering the data from its programming stream and 2) copying content onto the Arroyo Server hard disks to enable playback of a program requested by an RS-DVR customer. In addition, the district court found that Cablevision would infringe the public performance right by transmitting a program to an RS-DVR customer in response to that customer's playback request. We address each of these three allegedly infringing acts in turn.

I. The Buffer Data

It is undisputed that Cablevision, not any customer or other entity, takes the content from one stream of programming, after the split, and stores it, one small piece at a time, in the BMR buffer and the primary ingest buffer. As a result, the information is buffered before any customer requests a recording, and would be buffered even if no such request were made. The question is whether, by buffering the data that make up a given work, Cablevision "reproduce[s]" that work "in copies," 17 U.S.C. § 106(1), and thereby infringes the copyright holder's reproduction right.

"Copies," as defined in the Copyright Act, "are material objects ... in which a work is fixed by any method ... and from which the work can be ... reproduced." *Id.*§ 101. The Act also provides that a work is " 'fixed' in a tangible medium of expression when its embodiment ... is sufficiently permanent or stable to permit it to be ... reproduced ... *for a period of more than transitory duration.*" *Id.* (emphasis added). We believe that this language plainly imposes two distinct but related requirements: the work must be embodied in a medium, i.e., placed in a medium such that it can be perceived, reproduced, etc., from that medium (the "embodiment requirement"), and it must remain thus embodied "for a period of more than transitory duration" (the "duration requirement"). *See* 2 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 8.02[B][3], at 8-32 (2007). Unless both requirements are met, the work is not "fixed" in the buffer, and, as a result, the buffer data is not a "copy" of the original work whose data is buffered.

The district court mistakenly limited its analysis primarily to the embodiment requirement. As a result of this error, once it determined that the buffer data was "[c]learly ... capable of being reproduced," i.e., that the work was embodied in the buffer, the district court concluded that the work was therefore "fixed" in the buffer, and that a copy had thus been made. *Cablevision I,* 478 F. Supp. 2d at 621-22. In doing so, it relied on a line of cases beginning with *MAI Systems Corp. v. Peak Computer Inc.,* 991 F.2d 511 (9th Cir. 1993). It also relied on the United States Copyright Office's 2001 report on the Digital Millennium Copyright Act, which states, in essence, that an embodiment is fixed "[u]nless a reproduction manifests itself so fleetingly that *it cannot be copied.*" U.S. Copyright Office, *DMCA Section 104 Report* 111 (Aug. 2001) ("*DMCA Report*") (emphasis added), *available at* http:// www. copyright.gov/reports/studies/dmca/sec-104-report-vol-1. pdf.

The district court's reliance on cases like *MAI Systems* is misplaced. In general, those cases conclude that an alleged copy is fixed without addressing the duration requirement; it does not follow, however, that those cases assume, much less establish, that such a requirement does not exist. Indeed, the duration requirement, by itself, was not at issue in *MAI Systems* and its progeny. As a result, they do not speak to the issues squarely before us here: If a work is only "embodied" in a medium for a period of transitory duration, can it be "fixed" in that medium, and thus a copy? And what constitutes a period "of more than transitory duration"?

In *MAI Systems,* defendant Peak Computer, Inc., performed maintenance and repairs on computers made and sold by MAI Systems. In order to service a customer's computer, a Peak employee had to operate the computer and run the computer's copyrighted operating system software. *See MAI Sys.,* 991 F.2d at 513. The issue in *MAI Systems* was whether, by loading the software into the computer's RAM,[1] the repairman created a "copy" as defined in § 101. *See id.* at 517. The resolution of this issue turned on whether the software's embodiment in the computer's RAM was "fixed," within the meaning of the same section. The Ninth Circuit concluded that

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[1] To run a computer program, the data representing that program must be transferred from a data storage medium (such as a floppy disk or a hard drive) to a form of Random Access Memory ("RAM") where the data can be processed. The data buffers at issue here are also a form of RAM.

> by showing that Peak loads the software into the RAM and is then able to view the system error log and diagnose the problem with the computer, MAI has adequately shown that the representation created in the RAM is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."

Id. at 518 (quoting 17 U.S.C. § 101).

The *MAI Systems* court referenced the "transitory duration" language but did not discuss or analyze it. The opinion notes that the defendants "vigorously" argued that the program's embodiment in the RAM was not a copy, but it does not specify the arguments defendants made. *Id.* at 517. This omission suggests that the parties did not litigate the significance of the "transitory duration" language, and the court therefore had no occasion to address it. This is unsurprising, because it seems fair to assume that in these cases the program was embodied in the RAM for at least several minutes.

Accordingly, we construe *MAI Systems* and its progeny as holding that loading a program into a computer's RAM *can* result in copying that program.

We do not read *MAI Systems* as holding that, as a matter of law, loading a program into a form of RAM *always* results in copying. Such a holding would read the "transitory duration" language out of the definition, and we do not believe our sister circuit would dismiss this statutory language without even discussing it. It appears the parties in *MAI Systems* simply did not dispute that the duration requirement was satisfied; this line of cases simply concludes that when a program is loaded into RAM, the embodiment requirement is satisfied-an important holding in itself, and one we see no reason to quibble with here.[2]

At least one court, relying on *MAI Systems* in a highly similar factual setting, has made this point explicitly. In *Advanced Computer Services of*

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[2] The same reasoning also distinguishes this court's opinion in *Matthew Bender & Co. v. West Publishing Co.*, 158 F.3d 693 (2d Cir. 1998). Language in that opinion, taken out of context, suggests that the definition of "fixed" imposes only an embodiment requirement: "Under § 101's definition of 'copies,' a work satisfies the fixation requirement when it is fixed in a material object from which it can be perceived or communicated directly or with the aid of a machine." *Id.* at 702. Like the *MAI Systems* cases, *Matthew Bender* only addresses the embodiment requirement: specifically, whether West's copyrighted arrangement of judicial opinions was "embedded" in a CD-ROM compilation of opinions when the cases were normally arranged differently but could be manipulated by the user to replicate West's copyrighted arrangement. *Id.* at 703. The opinion merely quotes the duration language without discussing it, *see id.* at 702; that case therefore does not compel us to conclude that the definition of "fixed" does not impose a duration requirement.

Michigan, Inc. v. MAI Systems Corp., the district court expressly noted that the unlicensed user in that case ran copyrighted diagnostic software "for minutes or longer," but that the program's embodiment in the computer's RAM might be too ephemeral to be fixed if the computer had been shut down "within seconds or fractions of a second" after loading the copyrighted program. 845 F. Supp. 356, 363 (E.D. Va. 1994). We have no quarrel with this reasoning; it merely makes explicit the reasoning that is implicit in the other *MAI Systems* cases. Accordingly, those cases provide no support for the conclusion that the definition of "fixed" does not include a duration requirement. *See Webster v. Fall,* 266 U.S. 507, 511, 45 S. Ct. 148, 69 L. Ed. 411 (1924) ("Questions which merely lurk in the record, neither brought to the attention of the court nor ruled upon, are not to be considered as having been so decided as to constitute precedents.").

Nor does the Copyright Office's 2001 DMCA Report, also relied on by the district court in this case, explicitly suggest that the definition of "fixed" does not contain a duration requirement. However, as noted above, it does suggest that an embodiment is fixed "[u]nless a reproduction manifests itself so fleetingly that it cannot be copied, perceived or communicated." *DMCA Report, supra,* at 111. As we have stated, to determine whether a work is "fixed" in a given medium, the statutory language directs us to ask not only 1) whether a work is "embodied" in that medium, but also 2) whether it is embodied in the medium "for a period of more than transitory duration." According to the Copyright Office, if the work is capable of being copied from that medium *for any amount of time*, the answer to both questions is "yes." The problem with this interpretation is that it reads the "transitory duration" language out of the statute.

We assume, as the parties do, that the Copyright Office's pronouncement deserves only *Skidmore* deference, deference based on its "power to persuade." *Skidmore v. Swift & Co.,* 323 U.S. 134, 140, 65 S. Ct. 161, 89 L. Ed. 124 (1944). And because the Office's interpretation does not explain why Congress would include language in a definition if it intended courts to ignore that language, we are not persuaded.

In sum, no case law or other authority dissuades us from concluding that the definition of "fixed" imposes both an embodiment requirement and a duration requirement. *Accord CoStar Group Inc. v. LoopNet, Inc.,* 373 F.3d 544, 551 (4th Cir. 2004) (while temporary reproductions "may be made in this transmission process, they would appear not to be 'fixed' in the sense that they are 'of more than transitory duration'"). We now turn to whether, in this case, those requirements are met by the buffer data.

Cablevision does not seriously dispute that copyrighted works are "embodied" in the buffer. Data in the BMR buffer can be reformatted and transmitted to the other components of the RS-DVR system. Data in the primary ingest buffer can be copied onto the Arroyo hard disks if a user has requested a recording of that data. Thus, a work's "embodiment" in either buffer "is sufficiently permanent or stable to permit it to be perceived, reproduced," (as in the case of the ingest buffer) "or otherwise communicated" (as in the BMR buffer). 17 U.S.C. § 101. The result might be different if only a single second of a much longer work was placed in the buffer in isolation. In such a situation, it might be reasonable to conclude that only a minuscule portion of a work, rather than "a work" was embodied in the buffer. Here, however, where every second of an entire work is placed, one second at a time, in the buffer, we conclude that the work is embodied in the buffer.

Does any such embodiment last "for a period of more than transitory duration"? *Id.* No bit of data remains in any buffer for more than a fleeting 1.2 seconds. And unlike the data in cases like *MAI Systems,* which remained embodied in the computer's RAM memory until the user turned the computer off, each bit of data here is rapidly and automatically overwritten as soon as it is processed. While our inquiry is necessarily fact-specific, and other factors not present here may alter the duration analysis significantly, these facts strongly suggest that the works in this case are embodied in the buffer for only a "transitory" period, thus failing the duration requirement.

Against this evidence, plaintiffs argue only that the duration is not transitory because the data persist "long enough for Cablevision to make reproductions from them." Br. of Pls.-Appellees the Cartoon Network et al. at 51. As we have explained above, however, this reasoning impermissibly reads the duration language out of the statute, and we reject it. Given that the data reside in no buffer for more than 1.2 seconds before being automatically overwritten, and in the absence of compelling arguments to the contrary, we believe that the copyrighted works here are not "embodied" in the buffers for a period of more than transitory duration, and are therefore not "fixed" in the buffers. Accordingly, the acts of buffering in the operation of the RS-DVR do not create copies, as the Copyright Act defines that term. Our resolution of this issue renders it unnecessary for us to determine whether any copies produced by buffering data would be de minimis, and we express no opinion on that question.

II. Direct Liability for Creating the Playback Copies

In most copyright disputes, the allegedly infringing act and the identity of the infringer are never in doubt. These cases turn on whether the conduct in question does, in fact, infringe the plaintiff's copyright. In this case, however, the core of the dispute is over the authorship of the infringing conduct. After an RS-DVR subscriber selects a program to record, and that program airs, a copy of the program-a copyrighted work-resides on the hard disks of Cablevision's Arroyo Server, its creation unauthorized by the copyright holder. The question is *who* made this copy. If it is Cablevision, plaintiffs' theory of direct infringement succeeds; if it is the customer, plaintiffs' theory fails because Cablevision would then face, at most, secondary liability, a theory of liability expressly disavowed by plaintiffs.

Few cases examine the line between direct and contributory liability. Both parties cite a line of cases beginning with *Religious Technology Center v. Netcom On-Line Communication Services,* 907 F. Supp. 1361 (N.D. Cal. 1995). In *Netcom,* a third-party customer of the defendant Internet service provider ("ISP") posted a copyrighted work that was automatically reproduced by the defendant's computer. The district court refused to impose direct liability on the ISP, reasoning that "[a]lthough copyright is a strict liability statute, there should still be some element of volition or causation which is lacking where a defendant's system is merely used to create a copy by a third party." *Id.* at 1370. Recently, the Fourth Circuit endorsed the *Netcom* decision, noting that

> to establish *direct* liability under ... the Act, something more must be shown than mere ownership of a machine used by others to make illegal copies. There must be actual infringing conduct with a nexus sufficiently close and causal to the illegal copying that one could conclude that the machine owner himself trespassed on the exclusive domain of the copyright owner."

CoStar Group, Inc. v. LoopNet, Inc., 373 F.3d 544, 550 (4th Cir. 2004).

Here, the district court pigeon-holed the conclusions reached in *Netcom* and its progeny as "premised on the unique attributes of the Internet." *Cablevision I*, 478 F. Supp. 2d at 620. While the *Netcom* court was plainly concerned with a theory of direct liability that would effectively "hold the entire Internet liable" for the conduct of a single user, 907 F. Supp. at 1372, its reasoning and conclusions, consistent with precedents of this court and the Supreme Court, and with the text of the Copyright Act, transcend the Internet. Like the Fourth Circuit, we reject the contention that "the *Netcom* decision was driven by expedience and that its holding is inconsistent with the established law of copyright," *CoStar*, 373 F.3d at 549, and we find it "a particularly rational interpretation of § 106," *id.* at 551, rather than a special-purpose rule applicable only to ISPs.

When there is a dispute as to the author of an allegedly infringing instance of reproduction, *Netcom* and its progeny direct our attention to the volitional conduct that causes the copy to be made. There are only two instances of volitional conduct in this case: Cablevision's conduct in designing, housing, and maintaining a system that exists only to produce a copy, and a customer's conduct in ordering that system to produce a copy of a specific program. In the case of a VCR, it seems clear-and we know of no case holding otherwise-that the operator of the VCR, the person who actually presses the button to make the recording, supplies the necessary element of volition, not the person who manufactures, maintains, or, if distinct from the operator, owns the machine. We do not believe that an RS-DVR customer is sufficiently distinguishable from a VCR user to impose liability as a direct infringer on a different party for copies that are made automatically upon that customer's command.

The district court emphasized the fact that copying is "instrumental" rather than "incidental" to the function of the RS-DVR system. *Cablevision I,* 478 F. Supp. 2d at 620. While that may distinguish the RS-DVR from the ISPs in *Netcom* and *CoStar,* it does not distinguish the RS-DVR from a VCR, a photocopier, or even a typical copy shop. And the parties do not seem to contest that a company that merely makes photocopiers available to the public on its premises, without more, is not subject to liability for direct infringement for reproductions made by customers using those copiers. They only dispute whether Cablevision is similarly situated to such a proprietor.

The district court found Cablevision analogous to a copy shop that makes course packs for college professors. In the leading case involving such a shop, for example, "[t]he professor [gave] the copyshop the materials of which the coursepack [was] to be made up, and the copyshop [did] the rest." *Princeton Univ. Press v. Mich. Document Servs.,* 99 F.3d 1381, 1384 (6th Cir. 1996) (en banc). There did not appear to be any serious dispute in that case that the shop itself was directly liable for reproducing copyrighted works. The district court here found that Cablevision, like this copy shop, would be "doing" the copying, albeit "at the customer's behest." *Cablevision I,* 478 F. Supp. 2d at 620.

But because volitional conduct is an important element of direct liability, the district court's analogy is flawed. In determining who actually "makes" a copy, a significant difference exists between making a request to a human employee, who then volitionally operates the copying system to make the copy, and issuing a command directly to a system, which automatically obeys commands and engages in no volitional conduct. In cases like *Princeton University Press,* the defendants operated a copying device and sold the product they made using that device. *See* 99 F.3d at 1383 ("The corporate defendant ... is a commercial copyshop that reproduced substantial segments of copyrighted works of scholarship, bound the copies into 'coursepacks,' and sold the coursepacks to students...."). Here, by selling access to a system that automatically produces copies on command, Cablevision more closely resembles a store proprietor who charges customers to use a photocopier on his premises, and it seems incorrect to say, without more, that such a proprietor "makes" any copies when his machines are actually operated by his customers. *See Netcom,* 907 F. Supp. at 1369. Some courts have held to the contrary, but they do not explicitly explain why, and we find them unpersuasive. *See, e.g., Elektra Records Co. v. Gem Elec. Distribs., Inc.,* 360 F. Supp. 821, 823 (E.D.N.Y. 1973) (concluding that, "regardless" of whether customers or defendants' employees operated the tape-copying machines at defendants' stores, defendant had actively infringed copyrights).

The district court also emphasized Cablevision's "unfettered discretion in selecting the programming that it would make available for recording." *Cablevision I,* 478 F. Supp. 2d at 620. This conduct is indeed more proximate to the creation of illegal copying than, say, operating an ISP or opening a copy shop, where all copied content was supplied by the customers themselves or other third parties. Nonetheless, we do not think it sufficiently proximate to the copying to displace the customer as the person who "makes" the copies when determining liability under the Copyright Act. Cablevision, we note, also has subscribers who use home VCRs or DVRs (like TiVo), and has significant control over the content recorded by these customers. But this control is limited to the channels of programming available to a customer and not to the programs themselves. Cablevision has no control over what programs are made available on individual channels or when those programs will air, if at all. In this respect, Cablevision possesses far less control over recordable content than it does in the VOD context, where it actively selects and makes available beforehand the individual programs available for viewing. For these reasons, we are not inclined to say that Cablevision, rather than the user, "does" the copying produced by the RS-DVR system. As a result, we find that the district court erred in concluding that Cablevision, rather than its RS-DVR customers, makes the copies carried out by the RS-DVR system.

Our refusal to find Cablevision directly liable on these facts is buttressed by the existence and contours of the Supreme Court's doctrine of contributory liability in the copyright context. After all, the purpose of any causation-based liability doctrine is to identify the actor (or actors) whose "conduct has been so significant and important a cause that [he or she] should be legally responsible." W. Page Keeton et al., *Prosser and Keeton on Torts* § 42, at 273 (5th ed.1984). But here, to the extent that we may construe the boundaries of direct liability more narrowly, the doctrine of contributory liability stands ready to provide adequate protection to copyrighted works.

Most of the facts found dispositive by the district court-e.g., Cablevision's "continuing relationship" with its RS-DVR customers, its control over recordable content, and the "instrumental[ity]" of copying to the RS-DVR system, *Cablevision I*, 478 F. Supp. 2d at 618-20-seem to us more relevant to the question of contributory liability. In *Sony Corp. of America v. Universal City Studios, Inc.*, the lack of an "ongoing relationship" between Sony and its VCR customers supported the Court's conclusion that it should not impose *contributory* liability on Sony for any infringing copying done by Sony VCR owners.

464 U.S. 417, 437-38 (1984). The *Sony* Court did deem it "just" to impose liability on a party in a "position to control" the infringing uses of another, but as a contributory, not direct, infringer. *Id.* at 437.

And asking whether copying copyrighted material is only "incidental" to a given technology is akin to asking whether that technology has "commercially significant noninfringing uses," another inquiry the *Sony* Court found relevant to whether imposing *contributory* liability was just. *Id.* at 442.

The Supreme Court's desire to maintain a meaningful distinction between direct and contributory copyright infringement is consistent with congressional intent. The Patent Act, unlike the Copyright Act, expressly provides that someone who "actively induces infringement of a patent" is "liable as an infringer," 35 U.S.C. § 271(b), just like someone who commits the underlying infringing act by "us[ing]" a patented invention without authorization, *id.* § 271(a). In contrast, someone who merely "sells ... a material or apparatus for use in practicing a patented process" faces only liability as a "contributory infringer." *Id.* § 271(c). If Congress had meant to assign direct liability to both the person who actually commits a copyright-infringing act and any person who actively induces that infringement, the Patent Act tells us that it knew how to draft a statute that would have this effect. Because Congress did not do so, the *Sony* Court concluded that "[t]he Copyright Act does not expressly render anyone liable for infringement committed by another." 464 U.S. at 434.

Furthermore, in cases like *Sony*, the Supreme Court has strongly signaled its intent to use the doctrine of contributory infringement, not direct infringement, to "identify[ ] the circumstances in which it is just to hold one individual accountable for the actions of another." *Id.* at 435. Thus, although *Sony* warns us that "the lines between direct infringement, contributory infringement, and vicarious liability are not clearly drawn," *id.* at 435 n.17 (internal quotation marks and citation omitted), that decision does not absolve us of our duty to discern where that line falls in cases, like this one, that require us to decide the question.

The district court apparently concluded that Cablevision's operation of the RS-DVR system would contribute in such a major way to the copying done by another that it made sense to say that Cablevision was a direct infringer, and thus, in effect, was "doing" the relevant copying. There are certainly other cases, not binding on us, that follow this approach. *See, e.g.*, *Playboy Enters. v. Russ Hardenburgh, Inc.*, 982 F. Supp. 503, 513 (N.D. Ohio 1997) (noting that defendant ISP's encouragement of its users to copy protected files was "crucial" to finding that it was a direct infringer). We need not decide today whether one's contribution to the creation of an infringing copy may be so great that it warrants holding that party directly liable for the infringement, even though another party has actually made the copy. We conclude only that on the facts of this case, copies produced by the RS-DVR system are "made" by the RS-DVR customer, and

Cablevision's contribution to this reproduction by providing the system does not warrant the imposition of direct liability. Therefore, Cablevision is entitled to summary judgment on this point, and the district court erred in awarding summary judgment to plaintiffs.

III. Transmission of RS-DVR Playback

Plaintiffs' final theory is that Cablevision will violate the Copyright Act by engaging in unauthorized public performances of their works through the playback of the RS-DVR copies. The Act grants a copyright owner the exclusive right, "in the case of ... motion pictures and other audiovisual works, to perform the copyrighted work publicly." 17 U.S.C. § 106(4). Section 101, the definitional section of the Act, explains that

> [t]o perform or display a work "publicly" means (1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or (2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

Id. § 101.

The parties agree that this case does not implicate clause (1). Accordingly, we ask whether these facts satisfy the second, "transmit clause" of the public performance definition: Does Cablevision "transmit ... a performance ... of the work ... to the public"? *Id.* No one disputes that the RS-DVR playback results in the transmission of a performance of a work-the transmission from the Arroyo Server to the customer's television set. Cablevision contends that (1) the RS-DVR customer, rather than Cablevision, does the transmitting and thus the performing and (2) the transmission is not "to the public" under the transmit clause.

As to Cablevision's first argument, we note that our conclusion in Part II that the customer, not Cablevision, "does" the copying does not dictate a parallel conclusion that the customer, and not Cablevision, "performs" the copyrighted work. The definitions that delineate the contours of the reproduction and public performance rights vary in significant ways. For example, the statute defines the verb "perform" and the noun "copies," but not the verbs "reproduce" or "copy." *Id.* We need not address Cablevision's first argument further because, even if we assume that Cablevision makes the transmission when an RS-DVR playback occurs, we find that the RS-DVR playback, as described here, does not involve the transmission of a performance "to the public."

The statute itself does not expressly define the term "performance" or the phrase "to the public." It does explain that a transmission may be "to the public ... whether the members of the public capable of receiving the performance ... receive it in the same place or in separate places and at the same time or at different times." *Id.* This plain language instructs us that, in determining whether a transmission is "to the public," it is of no moment that the potential recipients of the transmission are in different places, or that they may receive the transmission at different times. The implication from this same language, however, is that it is relevant, in determining whether a transmission is made to the public, to discern who is "capable of receiving" the performance being transmitted. The fact that the statute says "capable of receiving the performance," instead of "capable of receiving the transmission," underscores the fact that a transmission of a performance is itself a performance. *Cf. Buck v. Jewell-La Salle Realty Co.,* 283 U.S. 191, 197-98 (1931).

The legislative history of the transmit clause supports this interpretation. The House Report on the 1976 Copyright Act states that

> [u]nder the bill, as under the present law, a performance made available *by transmission to the public at large* is "public" even though the recipients are not gathered in a single place, and even if there is no proof that any of

> the *potential recipients* was operating his receiving apparatus at the time of the transmission. The same principles apply whenever the *potential recipients of the transmission* represent a limited segment of the public, such as the occupants of hotel rooms or the subscribers of a cable television service.

H.R. Rep. No. 94-1476, at 64-65 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5678 (emphases added).

Plaintiffs also reference a 1967 House Report, issued nearly a decade before the Act we are interpreting, stating that the same principles apply where the transmission is "*capable of reaching* different recipients at different times, as in the case of sounds or images stored in an information system and *capable of being performed or displayed* at the initiative of individual members of the public." H.R. Rep. No. 90-83, at 29 (1967) (emphases added). We question how much deference this report deserves. But we need not belabor the point here, as the 1967 report is consistent with both legislative history contemporaneous with the Act's passage and our own interpretation of the statute's plain meaning.

From the foregoing, it is evident that the transmit clause directs us to examine who precisely is "capable of receiving" a particular transmission of a performance. Cablevision argues that, because each RS-DVR transmission is made using a single unique copy of a work, made by an individual subscriber, one that can be decoded exclusively by that subscriber's cable box, only one subscriber is capable of receiving any given RS-DVR transmission. This argument accords with the language of the transmit clause, which, as described above, directs us to consider the potential audience of a given transmission. We are unpersuaded by the district court's reasoning and the plaintiffs' arguments that we should consider a larger potential audience in determining whether a transmission is "to the public."

The district court, in deciding whether the RS-DVR playback of a program to a particular customer is "to the public," apparently considered all of Cablevision's customers who subscribe to the channel airing that program and all of Cablevision's RS-DVR subscribers who request a copy of that program. Thus, it concluded that the RS-DVR playbacks constituted public performances because "Cablevision would transmit the *same program* to members of the public, who may receive the performance at different times, depending on whether they view the program in real time or at a later time as an RS-DVR playback." *Cablevision I,* 478 F. Supp. 2d at 623 (emphasis added). In essence, the district court suggested that, in considering whether a transmission is "to the public," we consider not the potential audience of a particular transmission, but the potential audience of the underlying work (i.e., "the program") whose content is being transmitted.

We cannot reconcile the district court's approach with the language of the transmit clause. That clause speaks of people capable of receiving a particular "transmission" or "performance," and not of the potential audience of a particular "work." Indeed, such an approach would render the "to the public" language surplusage. Doubtless the *potential* audience for every copyrighted audiovisual work is the general public. As a result, any transmission of the content of a copyrighted work would constitute a public performance under the district court's interpretation. But the transmit clause obviously contemplates the existence of non-public transmissions; if it did not, Congress would have stopped drafting that clause after "performance."

On appeal, plaintiffs offer a slight variation of this interpretation. They argue that both in its real-time cablecast and via the RS-DVR playback, Cablevision is in fact transmitting the "same performance" of a given work: the performance of the work that occurs when the programming service supplying Cablevision's content transmits that content to Cablevision and the service's other licensees. *See* Br. of Pls.-Appellees Twentieth Century Fox Film Corp. et al. at 27 ("Fox Br.") ("The critical factor ... is that the same *performance* is transmitted to different subscribers at different times .... more specifically, the *performance* of that program *by HBO or another programming service*."(third emphasis added)).

Thus, according to plaintiffs, when Congress says that to perform a work publicly means to transmit ... a performance ... to the public, they really meant "transmit ... the 'original performance' ... to the public." The implication of this theory is that to determine whether a given transmission of a performance is "to the public," we would consider not only the potential audience of that transmission, but also the potential audience of any transmission of the same underlying "original" performance.

Like the district court's interpretation, this view obviates any possibility of a purely private transmission. Furthermore, it makes Cablevision's liability depend, in part, on the actions of legal strangers. Assume that HBO transmits a copyrighted work to both Cablevision and Comcast. Cablevision merely retransmits the work from one Cablevision facility to another, while Comcast retransmits the program to its subscribers. Under plaintiffs' interpretation, Cablevision would still be transmitting the performance to the public, solely because Comcast has transmitted the same underlying performance to the public. Similarly, a hapless customer who records a program in his den and later transmits the recording to a television in his bedroom would be liable for publicly performing the work simply because some other party had once transmitted the same underlying performance to the public.

We do not believe Congress intended such odd results. Although the transmit clause is not a model of clarity, we believe that when Congress speaks of transmitting a performance to the public, it refers to the performance created by the act of transmission. Thus, HBO transmits its own performance of a work when it transmits to Cablevision, and Cablevision transmits its own performance of the same work when it retransmits the feed from HBO.

Furthermore, we believe it would be inconsistent with our own transmit clause jurisprudence to consider the potential audience of an upstream transmission by a third party when determining whether a defendant's own subsequent transmission of a performance is "to the public." In *National Football League v. PrimeTime 24 Joint Venture* (NFL), 211 F.3d 10 (2000), we examined the transmit clause in the context of satellite television provider PrimeTime, which captured protected content in the United States from the NFL, transmitted it from the United States to a satellite ("the uplink"), and then transmitted it from the satellite to subscribers in both the United States and Canada ("the downlink"). PrimeTime had a license to transmit to its U.S. customers, but not its Canadian customers. It argued that although the downlink transmission to its Canadian subscribers was a public performance, it could not be held liable for that act because it occurred entirely outside of the United States and therefore was not subject to the strictures of the Copyright Act. It also argued that the uplink transmission was not a public performance because it was a transmission to a single satellite. *See id.* at 12.

The *NFL* court did not question the first assumption, but it flatly rejected the second on a specific and germane ground:

> We believe the most logical interpretation of the Copyright Act is to hold that a public performance or display includes each step in the process by which a protected work wends its way to its audience. Under that analysis, it is clear that PrimeTime's uplink transmission of signals captured in the United States is a step in the process by which NFL's protected work wends its way *to a public audience.*

Id. at 13 (emphasis added) (internal quotation and citation omitted). Thus, while the uplink transmission that took place in the United States was not, in itself, "to the public," the *NFL* court deemed it so because it ultimately resulted in an undisputed public performance. Notably, the *NFL* court did not base its decision on the fact that an upstream transmission by another party (the NFL) might have been to the public. Nor did the court base its decision on the fact that Primetime simultaneously transmitted a performance of the work to the public in the United States. Because *NFL* directs us to look downstream, rather than upstream or laterally, to determine whether any link in a chain of transmissions made by a party constitutes a public performance, we reject plaintiffs' contention that we examine the potential recipients of the content provider's initial transmission to determine who is capable of receiving the RS-DVR playback transmission.

Plaintiffs also rely on *NFL* for the proposition that Cablevision publicly performs a work when it splits its programming stream and transmits the second stream to the RS-DVR system. Because *NFL* only supports that conclusion if we determine that the final transmission in the chain (i.e., the RS-DVR playback transmission) is "to the public," plaintiffs' reliance on *NFL* is misplaced. *NFL* dealt with a chain of transmissions whose final link was undisputedly a public performance. It therefore does not guide our current inquiry.

In sum, none of the arguments advanced by plaintiffs or the district court alters our conclusion that, under the transmit clause, we must examine the potential audience of a given transmission by an alleged infringer to determine whether that transmission is "to the public." And because the RS-DVR system, as designed, only makes transmissions to one subscriber using a copy made by that subscriber, we believe that the universe of people capable of receiving an RS-DVR transmission is the single subscriber whose self-made copy is used to create that transmission.

Plaintiffs contend that it is "wholly irrelevant, in determining the existence of a public performance, whether 'unique' *copies* of the same work are used to make the transmissions." Fox Br. at 27. But plaintiffs cite no authority for this contention. And our analysis of the transmit clause suggests that, in general, any factor that limits the *potential* audience of a transmission is relevant.

Furthermore, no transmission of an audiovisual work can be made, we assume, without using a copy of that work: to transmit a performance of a movie, for example, the transmitter generally must obtain a copy of that movie. As a result, in the context of movies, television programs, and other audiovisual works, the right of reproduction can reinforce and protect the right of public performance. If the owner of a copyright believes he is injured by a particular transmission of a performance of his work, he may be able to seek redress not only for the infringing transmission, but also for the underlying copying that facilitated the transmission. Given this interplay between the various rights in this context, it seems quite consistent with the Act to treat a transmission made using Copy A as distinct from one made using Copy B, just as we would treat a transmission made by Cablevision as distinct from an otherwise identical transmission made by Comcast. Both factors-the identity of the transmitter and the source material of the transmission-limit the potential audience of a transmission in this case and are therefore germane in determining whether that transmission is made "to the public."

Indeed, we believe that *Columbia Pictures Industries, Inc. v. Redd Horne, Inc.*, 749 F.2d 154 (3d Cir. 1984), relied on by both plaintiffs and the district court, supports our decision to accord significance to the existence and use of distinct copies in our transmit clause analysis. In that case, defendant operated a video rental store, Maxwell's, which also housed a number of small private booths containing seats and a television. Patrons would select a film, enter the booth, and close the door. An employee would then load a copy of the requested movie into a bank of VCRs at the front of the store and push play, thereby transmitting the content of the tape to the television in the viewing booth. *See id.* at 156-57.

The Third Circuit found that defendants' conduct constituted a public performance under both clauses of the statutory definition. In concluding that Maxwell's violated the transmit clause, that court explicitly relied on the fact that defendants showed the same copy of a work seriatim to its clientele, and it quoted a treatise emphasizing the same fact:

> Professor Nimmer's examination of this definition is particularly pertinent: "*if the same copy*... of a given work is repeatedly played (*i.e.*, 'performed') by different members of the public, albeit at different times, this constitutes a 'public' performance." 2 M. Nimmer, § 8.14[C][3], at 8-142 (emphasis in original).... Although Maxwell's has only one copy of each film, it shows each copy repeatedly to different members of the public. This constitutes a public performance.

Id. at 159 (first omission in original).

Unfortunately, neither the *Redd Horne* court nor Prof. Nimmer explicitly explains *why* the use of a distinct copy affects the transmit clause inquiry. But our independent analysis confirms the soundness of their intuition: the use of a unique copy may limit the potential audience of a transmission and is therefore relevant to whether that transmission is made "to the public." Plaintiffs' unsupported arguments to the contrary are unavailing.

Given that each RS-DVR transmission is made to a given subscriber using a copy made by that subscriber, we conclude that such a transmission is not "to the public," without analyzing the contours of that phrase in great detail. No authority cited by the parties or the district court persuades us to the contrary.

In addition to *Redd Horne,* the district court also cited and analyzed *On Command Video Corp. v. Columbia Pictures Industries,* 777 F. Supp. 787 (N.D. Cal. 1991), in its transmit clause analysis. In that case, defendant On Command developed and sold "a system for the electronic delivery of movie video tapes," which it sold to hotels. *Id.* at 788. The hub of the system was a bank of video cassette players, each containing a copy of a particular movie. From his room, a hotel guest could select a movie via remote control from a list on his television. The corresponding cassette player would start, and its output would be transmitted to that guest's room. During this playback, the movie selected was unavailable to other guests. *See id.* The court concluded that the transmissions made by this system were made to the public "because the relationship between the transmitter of the performance, On Command, and the audience, hotel guests, is a commercial, 'public' one regardless of where the viewing takes place." *Id.* at 790.

Thus, according to the *On Command* court, any commercial transmission is a transmission "to the public." We find this interpretation untenable, as it completely rewrites the language of the statutory definition. If Congress had wished to make all commercial transmissions public performances, the transmit clause would read: "to perform a work publicly means ... to transmit a performance for commercial purposes." In addition, this interpretation overlooks, as Congress did not, the possibility that even non-commercial transmissions to the public may diminish the value of a copyright. Finally, like *Redd Horne, On Command* is factually distinguishable, as successive transmissions to different viewers in that case could be made using a single copy of a given work. Thus, at the moment of transmission, any of the hotel's guests was capable of receiving a transmission made using a single copy of a given movie. As a result, the district court in this case erred in relying on *On Command.*

Plaintiffs also rely on *Ford Motor Co. v. Summit Motor Products, Inc.,* 930 F.2d 277 (3d Cir. 1991), in which the Third Circuit interpreted § 106(3) of the Copyright Act, which gives the copyright holder the exclusive right "to distribute copies ... of the copyrighted work *to the public*,"17 U.S.C. § 106(3) (emphasis added). The court concluded that "even one person can be the public *for the purposes of section 106(3)*." *Ford*, 930 F.2d at 299 (emphasis added). Commentators have criticized the *Ford* court for divesting the phrase "to the public" of "all meaning whatsoever," 2 Nimmer & Nimmer, *supra*, § 8.11[A], at 8-149, and the decision does appear to have that result. Whether this result was justified in the context of the distribution right is not for us to decide in this case. We merely note that we find no compelling reason, in the context of the transmit clause and the public performance right, to interpret the phrase "to the public" out of existence.

In sum, we find that the transmit clause directs us to identify the potential audience of a given transmission, i.e., the persons "capable of receiving" it, to determine whether that transmission is made "to the public." Because each RS-DVR playback transmission is made to a single subscriber using a single unique copy produced by that subscriber, we conclude that such transmissions are not performances "to the public," and therefore do not infringe any exclusive right of public performance. We base this decision on the application of undisputed facts; thus, Cablevision is entitled to summary judgment on this point.

This holding, we must emphasize, does not generally permit content delivery networks to avoid all copyright liability by making copies of each item of content and associating one unique copy with each subscriber to the network, or by giving their subscribers the capacity to make their own individual copies. We do not address whether such a network operator would be able to escape any other form of copyright liability, such as liability for unauthorized reproductions or liability for contributory infringement.

In sum, because we find, on undisputed facts, that Cablevision's proposed RS-DVR system would not directly infringe plaintiffs' exclusive rights to reproduce and publicly perform their copyrighted works, we grant summary judgment in favor of Cablevision with respect to both rights.

CONCLUSION

For the foregoing reasons, the district court's award of summary judgment to the plaintiffs is REVERSED and the district court's injunction against Cablevision is VACATED. The case is REMANDED for further proceedings consistent with this opinion.

Appendix B

United States District Court,
Southern District New York.

TWENTIETH CENTURY FOX FILM
CORPORATION et al., Plaintiffs,
v.
CABLEVISION SYSTEMS CORPORATION et ano,
Defendants.
The Cartoon Network LP, LLLP, et ano, Plaintiffs,
v.
CSC Holdings, Inc. et ano, Defendants,
etc.
Nos. 06 Civ. 3990(DC), 06 Civ. 4092(DC).

March 22, 2007.

OPINION

CHIN, District Judge.
In March 2006, Cablevision Systems Corporation ("Cablevision") announced that it would be rolling out a "new Remote-Storage DVR System" (the "RS-DVR"). The RS-DVR is intended for Cablevision customers who do not have a digital video recorder ("DVR") in their homes. The RS-DVR would permit these customers to record programs on central servers at Cablevision's facilities and play the programs back for viewing at home.

Cablevision has not obtained permission from plaintiffs, the owners of the copyrighted programs, to reproduce and transmit the programs through its proposed RS-DVR. It contends that a license is not required because the customer, not Cablevision, chooses the content and records the programs for personal viewing. It argues that, under *Sony Corp. v. Universal City Studios, Inc.,* 464 U.S. 417 (1984), a company cannot be liable for infringement merely because it supplies Betamax recorders, video cassette recorders ("VCRs"), or DVRs to consumers to record television programs for in-home, personal viewing, and it further contends that its RS-DVR is no different from these traditional devices.

In these related cases, plaintiffs sue Cablevision and its parent, CSC Holdings, Inc. ("CSC"), for copyright infringement, seeking a declaratory judgment that Cablevision's RS-DVR would violate their copyrights and an injunction enjoining defendants from rolling out the RS-DVR without copyright licenses. Defendants counterclaim for a declaratory judgment holding that the RS-DVR would not infringe on plaintiffs' copyrights. The parties' cross-motions for summary judgment are before the Court.

Plaintiffs' motions are granted and defendants' motion is denied, for I conclude that Cablevision, and not just its customers, would be engaging in unauthorized reproductions and transmissions of plaintiffs' copyrighted programs under the RS-DVR. Indeed, the RS-DVR is not a stand-alone machine that sits on top of a television. Rather, it is a complex system that involves an ongoing relationship between Cablevision and its customers, payment of monthly fees by the customers to Cablevision, ownership of the equipment remaining with Cablevision, the use of numerous computers and other equipment located in Cablevision's private facilities, and the ongoing maintenance of the system by Cablevision personnel. Accordingly, judgment will be entered in favor of plaintiffs.

STATEMENT OF THE CASE

A. *The Facts*

As the parties agree, the facts are largely undisputed. (Tr. 9, 194).[1]

1. *The Parties*

Plaintiffs, counterclaim-defendants, and third-party defendants are The Cartoon Network LP, LLLP; Cable News Network LP, LLLP; Turner Broadcasting System, Inc.; Turner Network Sales, Inc.; Turner Classic Movies, L.P., LLLP; Turner Network Television LP, LLLP; Twentieth Century Fox Film Corporation; Universal City Studios Productions LLLP, Paramount Pictures Corporation; Disney Enterprises, Inc.; CBS Broadcasting Companies, Inc.; and NBC Studios, Inc. (collectively, "plaintiffs"). Plaintiffs own the copyrights to numerous copyrighted entertainment programs, including movies, television series, news and sports shows, and cartoons, which are shown on television and also used (or licensed for use) in other media, including the Internet, DVDs, and cellular phone technology. Defendants, counter-claim plaintiffs, and third-party plaintiffs are Cablevision and CSC ("defendants"). They own and operate cable television systems, primarily in the New York City metropolitan area. Cablevision provides its customers with a wide variety of programs, including programs owned by plaintiffs, pursuant to negotiated and statutory (i.e., required by law) licenses or "affiliation agreements." (*See, e.g.,* Turner Exs. 25, 26).

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[1] "Tr." refers to the transcript of the hearing and oral argument on October 31 and November 1, 2006.

None of the licenses between plaintiffs and Cablevision authorizes Cablevision to transmit or reproduce plaintiffs' copyrighted programming through the RS-DVR. (Tr. 199-201).

2. *Cable Television*

Television involves the transmission of audio and video signals-"a moving picture, plus sound." (Horowitz Report ¶ 16). "Broadcast television" is transmitted over public airwaves and can be received with only a television set and an antenna. (*Id.* ¶ 30). "Cable television" is transmitted via a coaxial cable that is connected to a television set, usually through a "set-top box" provided by a cable company. (*Id.* ¶ 31). Cable companies offer customers, for a fee, a number of programming channels, including basic cable (*e.g.,* TNT and Disney Channel) and premium cable (*e.g.,* HBO and Showtime) channels. (*Id.* ¶ 32; Fox Statement of Facts ("Fox SOF") ¶¶ 2-4). Basic and premium cable channels, along with broadcast television stations, are linear channels, meaning that they televise programs sequentially at specified times of the day. (*Id.* ¶ 4).

i. *Delivery of Cable Programming*

Traditionally, television signals were transmitted in analog form. (Horowitz Report ¶ 19). In other words, the signals were transmitted as a series of continuous waves. (*Id.*). Today, television signals are increasingly delivered in digital form. (*See id.* ¶ 35). Digital signals are transmitted as compressed data in the form of binary digits, or "bits." (*Id.* ¶¶ 19-20, 38). The number of bits that can be sent in a second is known as the "bitrate." (*Id.* ¶ 41). Digital signals allow for a greater variety in television programming-because more signals can be transmitted in the same space-as well as interactive services and, often, better audio and image quality than analog television. (*Id.* ¶¶ 39-42). The RS-DVR would be offered as part of Cablevision's digital cable service.

Digital cable delivery starts with programming owners sending feeds of their content to the cable company, which collects the feeds at a "head-end," a central facility that houses much of the software and hardware necessary to operate a cable system. (Hartson Report ¶ 18; Mitchko Decl. ¶ 12; Tr. 18). For linear channels, the cable company collects all of the feeds into an "aggregated programming stream" ("APS"). (Tr. 18). The APS is composed of packets of data, each 188 bytes in size.[2] (*Id.;* Horowitz Report ¶ 46). Each packet is tagged with a "program identifier" ("PID") indicating the program to which it belongs. (Horowitz Report ¶ 47).

The APS is sent from the head-end to customers' homes through a process known as Quadrature Amplitude Modulation ("QAM"); the devices used to accomplish this process are called QAM modulators. (Hartson Report ¶ 29). QAM converts the digital signals into radio frequency ("RF") signals, which are more robust and better suited for transmission along a cable system's coaxial cable lines. (Tr. 19-20). The RF signals are sent over the coaxial network (the "RF Distribution Network"), which routes the signals to the various "nodes" or service groups-smaller cable systems connecting a group of homes-comprising the cable system. (Hartson Report ¶ 31). Each node is serviced by a particular QAM modulator. (Tr. 19-21). The RF signals are typically then routed to the customer's digital set-top box. (Hartson Report ¶ 32). The packets of the APS are filtered according to their PIDs and reassembled into a single program transport stream to be decrypted, decoded,[3] and displayed. (Horowitz Report ¶ 47). To limit access to certain programming such as premium channels, the cable company encrypts the packets in the APS.(*Id.*

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[2] One byte is equal to 8 bits.

[3] A digital television can directly receive digital signals. An analog television, however, cannot; it must have a decoding device-e.g., a set-top box-to convert digital signals into analog. (Hartson Report ¶ 19).

¶ 56). The set-top box has decryption hardware that "unlocks" the encrypted packets. (*Id.*).

ii. *Video-on-Demand*

Cable companies also provide certain services on an individual customer basis. Video-on-Demand ("VOD") is one such service. VOD allows a customer, using an on-screen menu and the remote control, to view at any time programming selected by the cable company. (Hartson Report ¶ 39; Horowitz Report ¶¶ 57-58, 60). Pursuant to licenses negotiated with the programming owners, the cable company receives programming for VOD exhibition at its head-end, where the content is stored on computers. (Hartson Report ¶ 39). The cable company delivers the VOD content on extra channel frequencies that are not being used for linear programming. (Horowitz Report ¶ 59).

VOD also requires a "reverse" channel for each customer, so that the customer can communicate with the cable company to select the desired programming and control the playback (i.e. rewind, fast-forward, and pause). (*Id.* ¶ 60). These playback control functions are known as "trick modes." (Gilmer Report at 10). Cablevision offers VOD to its digital cable customers, pursuant to licensing agreements it has with the programming owners. (Turner Statement of Facts ("Turner SOF") ¶¶ 24-25, 38).

3. *Recording Television Programming: VCRs and DVRs*

VCRs, introduced for home use more than 25 years ago, provided the first practical means for television viewers to record programming. (Hartson Report ¶ 33; *see* Tr. 122-23). VCRs capture programming from television signals and record it onto magnetic tape housed in a video cassette. (Hartson Report ¶ 33). DVRs were introduced to consumers in 1999 and are increasingly being used in place of VCRs to record television programming. (*Id.* ¶ 34). DVRs record programming to a hard-drive based digital storage medium, rather than to a video cassette. (*Id.* ¶ 35).

Many cable companies offer "set-top storage DVRs" ("STS-DVRs"), which combine the function of a standard cable set-top box and a DVR. (*Id.* ¶ 36; *see* Tr. 124-25). An STS-DVR can record digital programming streams directly (*i.e.*, without decoding them) onto a hard drive contained within the box. (Hartson Report ¶ 36). It may incorporate two tuners, allowing the customer to watch live programming on one channel and record on another, or record two channels simultaneously. (*Id.*). Customers with STS-DVRs use an on-screen program guide to select the programs they wish to record. (*Id.* ¶ 35). Once recorded, programming is stored on the box's hard drive and is available for playback. (*Id.*). The customer can use certain trick modes to control playback. (*Id.*). The amount of programming that can be stored depends on the size of the box's hard drive. (*Id.*).

Cablevision has offered Cablevision-owned STS-DVRs to its digital cable customers, for an additional fee, since November 2004. (Answer ¶ 18; Mitchko Decl. ¶ 6). A program may be recorded only if it is included within the tier of linear programming for which the customer has paid (the customer's "subscription programming"). (*Id.*). Customers cannot, for example, use the STS-DVR to record pay-per-view or VOD programming. (Mitchko Decl. ¶ 6).

4. *Cablevision's RS-DVR*

i. *Overview of the RS-DVR*

The RS-DVR is a type of network DVR ("nDVR"). (Hartson Report ¶ 47). An nDVR stores recorded programming in a central cable facility, rather than on the hard disk of the set-top box in the customer's home. (*Id.* ¶ 43). The RS-DVR would store recorded programming remotely on computer servers located at Cablevision head-ends. (Mitchko Decl. ¶ 12). The RS-DVR uses various components, including: (1) a remote control-the same one offered with Cablevision's STS-DVRs; (2) an on-screen program guide populated by data stored in a server located at the head-end-the same interface used by Cablevision's other digital cable customers; (3) a set-top box located in the customer's home; (4) "a network of wires, relays, switches, and RF devices connecting the set-top box ... to Cablevision's cable television system"; and (5) computer hardware and software located at Cablevision's head-ends. (*Id.* ¶

13). Cablevision would charge its customers an additional fee for their use of the RS-DVR. (Answer ¶ 18).

Recorded programming would be stored on servers designed by Arroyo Video Solutions, Inc. (each, an "Arroyo server") containing multiple hard disk drives. (Mitchko Decl. ¶ 14). Each customer would be allotted a specified amount of storage capacity on one of those hard drives; his or her recorded programming would be stored in that hard drive space and available only to that customer. (*Id.*). Cablevision determines the amount of memory allotted to each customer; initially, Cablevision contemplated allocating 80 megabytes of memory to each customer, but later decided on 160 megabytes. (Tr. 190-91).[4] A recorded program would be stored indefinitely on the Arroyo server until selected for deletion by the customer or automatically overwritten by Cablevision on a first-in, first-out basis to make room for another program. (Hartson Report ¶ 104).

As the above description makes clear, the RS-DVR is not a single piece of equipment. Rather, it is a complex system requiring numerous computers, processes, networks of cables, and facilities staffed by personnel twenty-four hours a day and seven days a week. (Tr. 182-86; *see also id.* at 113). Cablevision's expert estimated that some ten "boxes" would be involved for each Arroyo server. (*Id.* at 182-83). Plaintiffs' expert testified that the RS-DVR "service"- or at least some of it-was housed in a "big room" at Cablevision's facilities, approximately 60 feet by 60 feet. (*Id.* at 80-81). Moreover, in general a Cablevision RS-DVR customer would not be able to walk into Cablevision's facilities and touch the RS-DVR system. (*Id.* at 186).

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[4] In fact, Cablevision has considered offering customers-for an additional fee additional storage capacity. (*See* Tr. 190-91; Turner Ex. 43).

As for programming content, Cablevision determines the programming that will be available for recording with the RS-DVR. (*Id.* at 186-87). In other words, an RS-DVR subscriber would only be able to record programming made available by Cablevision. (*Id.*). Cablevision has elected to make all 170 channels received by Cablevision available to RS-DVR subscribers, but that is Cablevision's decision. (*Id.* at 64, 186-87; *see also id.* at 134). As a technical matter, Cablevision could choose to exclude certain channels. Indeed, Cablevision had earlier considering limiting the RS-DVR service to twelve channels or fifty channels before deciding on all 170 channels. (*Id.* at 188-89; Turner Ex. 41).

ii. *The RS-DVR Technology*

The starting point of the RS-DVR is the BarcoNet, a closed circuit network that receives Cablevision's programming content-the APS-for distribution. (Hartson Report ¶ 28; Lechner Report ¶ 25; Tr. 132-36). Ordinarily, when linear programming is delivered to customers, the APS flows from the BarcoNet to the QAM modulators for real-time distribution over the coaxial network to customers. (Tr. 19). For the RS-DVR to work, however, the APS must be split off from the BarcoNet into two streams, with the second stream sent to a device called the Big Band Broadband Multimedia Router ("BMR"). (*Id.;* Mitchko Decl. ¶ 26). The BMR does several things. Through a process known as clamping, the BMR converts the bitrate of the stream from the BarcoNet into one that is more efficient.[5] (Gilmer Report at 7). In the process of clamping, portions of programming are placed into the BMR's "buffer" memory. (Hartson Report ¶ 97).

An explanation of "buffers" is necessary here. All digital devices, including digital television, utilize transient data buffers, which are regions of memory that temporarily hold data. (Horowitz Report ¶ 50). This is a form of random access memory-RAM. (Tr. 65). Data is buffered-*i.e.,* the data temporarily resides in these buffers-as it moves from some source and is processed and transferred to its final destination. (Horowitz Report ¶ 50). Buffering takes place at several points during the operation of the RS-DVR, the first of which occurs when the programming stream arrives at the BMR. (Tr. 64-65).

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[5] The stream from the BarcoNet is variable bitrate ("VBR"), which means that the number of bits per second consumed by a particular television channel will vary. (Gilmer Report at 7). The BMR converts the VBR stream into a constant bit rate ("CBR") stream.

The BMR also converts the APS into a number of single program transport streams, meaning that there is only one channel in any given stream. (Gilmer Report at 7). Additionally, the BMR converts the packets comprising these streams into larger packets known as User Datagram Protocol ("UDP") packets. (Tr. 24). This process is called "encapsulation." (*Id.*). Each UDP packet is assigned a port number identifying the television channel to which it belongs. (*Id.* at 25; Gilmer Report at 7). From the BMR, the streams of programming travel to a "switch," which simply routes the packets from one port to another. (Hartson Report ¶ 55).

The streams are then fed into the Arroyo servers-the heart of the RS-DVR, for it is on these servers that programming is recorded and stored for later playback. (Lechner Report ¶ 2.5). Each Arroyo server can service up to ninety-six Cablevision customers. (Tr. 30, 36). The servers have two major functions: ingestion and retransmission. (Tr. 30-31). The latter comes into play at the playback stage, discussed infra. The first function involves the process by which programming is recorded. Upon receiving programming streams, the Arroyo servers "read" the streams into buffer memory. (*Id.* at 35; Hartson Report ¶ 56). This buffer is called the "primary ingest buffer." (Hartson Report ¶ 56; Tr. 35). Each packet of programming is stored in the primary ingest buffer for up to a tenth of a second. (Tr. 33-35, 106-10). The primary ingest buffer has the capacity to hold 6,000 packets at a time-the equivalent of about three frames of video. (*Id.*; *see also id.* 163-

64). This means that at any given time, an Arroyo server will have in its buffer memory three frames of video from each of the linear channels carried by Cablevision. (*Id.* at 36, 109-10). This buffering takes place automatically-before any customer requests anything-so that if a customer requests that a particular program be recorded, the appropriate packets can be retrieved from buffer memory and copied to the customer's hard drive storage space. (Lechner Report ¶ 2.5; Tr. 66, 184-85).

iii. ***Recording***

An RS-DVR customer can request that a program be recorded from any linear channel within his or her subscription programming in one of two ways. (Mitchko Decl. ¶ 18). First, the customer can use the remote control to navigate the on-screen program guide and schedule a future program to record. (*Id.*). The customer scrolls through a list of channels and programs, then presses the "record" button. (*Id.*). Second, while watching a program, the customer can simply press "record" on the remote control. (*Id.* ¶ 19).

When the set-top box receives the record command from the remote control, it relays the command to the "Application Data Server" ("ADS") server located at the head-end. (Hartson Report ¶ 57). The ADS verifies that: (1) the customer is authorized to receive the program in question; (2) the customer has not already requested that the program be recorded; (3) the customer has available hard drive storage space;

(4) the recording of the program will not result in the customer's recording more than two programs at the same time; and (5) the customer is not trying to record a program that is not within his or her subscription programming. (Mitchko Decl. ¶ 22). If any of the above criteria are not met, the RS-DVR causes an error message to be displayed on the customer's television screen with the appropriate remedial steps for the customer to take. (*Id.* ¶ 23).

Upon satisfaction of the above criteria, the ADS queries the "Oracle Production Server" ("OPRD"), which maintains a list of programs that have been requested for recording. (Hartson Report ¶ 58). If the program has previously been requested, the OPRD will send the "asset ID," a unique code for the program, to the ADS. (*Id.*). If the program has not been requested, the ADS communicates with another application so that an asset ID can be generated, by a server called the "Asset Management and Publishing System" ("AMP"), for that program. (*Id.* ¶ 59; Tr. 41). The AMP directs the newly created asset ID to the ADS, which notifies the OPRD. (Hartson Report ¶¶ 60-61). The asset ID is then added to the OPRD's list of programs to be recorded. (*Id.* ¶ 61). Once the ADS has the asset ID for a program, it communicates with the "Vitria" server. (*Id.* ¶ 62; Tr. 41). This server aggregates recording requests and is the only server to communicate directly with the Arroyo server. (Hartson Report ¶ 62; Tr. 41). When the time comes for a program selected for recording to run, the Vitria server sends a unified list of all the requests for that program to the ingestion component of the Arroyo server, which is holding the packets for that program in its buffer memory. (Hartson Report ¶¶ 58-62; Tr. 40-42).

Once the Arroyo server receives the list of recording requests from the Vitria server, it finds the packets for that particular program, which are sitting in the primary ingest buffer, then copies them to another place in its memory called the secondary ingest buffer. (Hartson Report ¶¶ 65; Tr. 42-44). A copy of the program is made for each customer that requested that the program be recorded. (Hartson Report ¶ 66; Mitchko Decl. ¶ 29). From the secondary ingestion buffer, a complete copy of the program is written to the hard drive of each requesting customer. (Hartson Report ¶¶ 63-67; Tr. 42-44). For instance, if 1000 customers want to record a specific episode of HBO's "The Wire," 1000 separate copies of that episode are made, each copy uniquely associated by identifiers with the set-top box of the requesting customer. (*See* Mitchko Decl. ¶ 29). Once a copy of the program is made to the customer's hard drive, the Arroyo server initiates a series of messages to inform the other components of the RS-DVR that the program has been recorded, is available for playback, and should appear as such on the customer's on-screen program guide. (Hartson Report ¶ 68; Mitchko Decl. ¶ 35; Tr. 44-45). The customer can request and control playback of the program, but the customer cannot copy it to an attached external disk drive or VCR, as can be done with a program recorded with a set-top DVR. (Tr. 46-47).

If no customer requests that a particular program be recorded, no copy of that program is made in the hard drives on the Arroyo server. (Mitchko Decl. ¶ 30). Portions of programming are copied to buffer memory in the BMR and to the primary ingest buffer, regardless of whether a customer requests that it be recorded. (Hartson Report ¶¶ 97-98).

iv. *Playback*

When customers want to play back recorded programming, they use their remote control to select the program from the on-screen program guide's list of recorded programs. (Mitchko Decl. ¶ 35). This initiates the retransmission function of the Arroyo servers. (Tr. 47). The set-top box communicates with a server called the "Enterprise Session Resource Manager" ("eSRM"), which manages the playback process. (Hartson Report ¶¶ 69-76; Tr. 47-49). The eSRM sends messages to the other components of the RS-DVR to verify that the playback command is valid, determine the location of the recorded program, and reserve space, or "bandwidth," in the QAM so that the program can be streamed to the customer's set-top box. (Hartson Report ¶¶ 71-74; Mitchko Decl. ¶¶ 37-39; Tr. 47-49). The Arroyo server locates the copy of the program stored on the customer's hard drive, reads it into buffer memory-here, the "streaming buffer"-and sends it to the Ciena switch, which routes the programming stream to the appropriate QAM serving that customer. (Tr. 49-50). The stream containing the program is transmitted to every home in the node where the requesting customer is located, but only the requesting set-top box is provided the key for decrypting the stream for viewing. (Hartson Report ¶ 75; Mitchko Decl. ¶ 42; Tr. 50, 76).

Once the playback session has started, the customer can use trick modes to pause, fast-forward, and rewind the program. (Hartson Report ¶ 76). To enable these trick modes, the RS-DVR automatically places one to two seconds worth of video data from the programming stream into buffer memory. (Hartson Report ¶ 101). If too many customers in a particular node are using their RS-DVR at the same time, the system will not be able to handle all of them and there will be the equivalent of a "busy signal" as an error message will be displayed. (Tr. 79-80).

B. *Procedural History*

The first of these two related cases was filed on May 24, 2006, and the second was filed on May 26, 2006. Plaintiffs in both actions seek declaratory and injunctive relief to prevent Cablevision from rolling out the RS-DVR without proper licenses for the use of plaintiffs' copyrighted works.[6]

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[6] Although the complaint in the first of these cases (the "*Fox*" case) is entitled "Complaint for Declaratory and Injunctive Relief," the prayer for relief includes a request for damages. (*Fox* Compl. 10). As the RS-DVR roll-out has been stayed and the complaint does not allege damages, the Court assumes the *Fox* plaintiffs are not actually seeking damages.

By stipulation so ordered June 7, 2006, plaintiffs agreed that they were asserting only claims of direct copyright infringement, and defendants agreed that they would not assert a "fair use" defense. Defendants further agreed not to proceed with the roll-out of the RS-DVR pending resolution by the Court of the question of liability in this action.

After conducting limited discovery, the parties filed cross-motions for summary judgment. I conducted a hearing and heard oral argument on October 31 and November 1, 2006. The parties agreed that the Court would be able to assess credibility and make findings as to the expert testimony presented at the hearing. They further agreed that following the hearing, the Court would have a sufficient record upon which to enter judgment in this case, unless the Court determined that there were disputed issues of material fact that prevented entry of judgment.

DISCUSSION

A. *Summary Judgment Standard*

The standards governing motions for summary judgment are well-settled. A court may grant summary judgment only where there is no genuine issue of material fact and the moving party is therefore entitled to judgment as a matter of law. *See* Fed R. Civ. P. 56(c); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 585-87 (1986). Accordingly, the court's task is not to "weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 249 (1986). To create an issue for trial, there must be sufficient evidence in the record to support a jury verdict in the nonmoving party's favor. *See id.*

To defeat a motion for summary judgment, the nonmoving party "must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita,* 475 U.S. at 586. As the Supreme Court stated in Anderson, "[i]f the evidence is merely colorable, or is not significantly probative, summary judgment may be granted." *Anderson,* 477 U.S. at 249-50 (citations omitted). The nonmoving party may not rest upon mere conclusory allegations or denials, but must set forth "concrete particulars" showing that a trial is needed. *Nat'l Union Fire Ins. Co. v. Deloach,* 708 F. Supp. 1371, 1379 (S.D.N.Y. 1989) (quoting *R.G. Group, Inc. v. Horn & Hardart Co.,* 751 F.2d 69, 77 (2d Cir. 1984) (internal quotations omitted)). Accordingly, it is insufficient for a party opposing summary judgment "merely to assert a conclusion without supplying supporting arguments or facts." *BellSouth Telecomms., Inc. v. W.R. Grace & Co.,* 77 F.3d 603, 615 (2d Cir. 1996) (internal quotations omitted).

A court faced with cross-motions for summary judgment need not "grant judgment as a matter of law for one side or the other," but "must evaluate each party's motion on its own merits, taking care in each instance to draw all reasonable inferences against the party whose motion is under consideration." *Heublein, Inc. v. United States,* 996 F.2d 1455, 1461 (2d Cir. 1993) (quoting *Schwabenbauer v. Bd. of Ed. of Olean,* 667 F.2d 305, 313-14 (2d Cir. 1981) (internal citations omitted)).

B. *Copyright Infringement*

The Copyright Act of 1976 (the "Copyright Act"), 17 U.S.C. § 101 *et seq.,* confers upon copyright owners the exclusive rights to, among other things, "reproduce the copyrighted work in copies" and "in the case of ... audiovisual works, to perform the copyrighted work publicly." *Id.* §§ 106(1) and (4) (2002). "To establish a claim of copyright infringement, a plaintiff must establish (1) ownership of a valid copyright and (2) unauthorized copying or a violation of one of the other exclusive rights afforded copyright owners pursuant to the Copyright Act."*Byrne v. British Broad. Corp.,* 132 F. Supp. 2d 229, 232 (S.D.N.Y. 2001) (citing *Twin Peaks Prods. v. Publ'ns Int'l. Ltd.,* 996 F.2d 1366, 1372 (2d Cir. 1993)); *see Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.,* 499 U.S. 340, 361 (1991).

Here, it is undisputed that plaintiffs own valid copyrights for the television programming at issue. The only question before the Court is whether Cablevision is "copying" plaintiffs' copyrighted programming or otherwise violating plaintiffs' rights under the Copyright Act.

Plaintiffs allege that Cablevision, through its RS-DVR, directly infringes upon their copyrights in two ways: one, Cablevision makes unauthorized copies of plaintiffs' programming, in violation of plaintiffs' right to reproduce their work; and two, Cablevision makes unauthorized transmissions of plaintiffs' programming, in violation of plaintiffs' exclusive right to publicly perform their work. I address each argument in turn.

1. *Is Cablevision Making Unauthorized Copies?*

According to plaintiffs, Cablevision makes multiple unauthorized copies of programming in two respects: (1) a complete copy of a program selected for recording is stored indefinitely on the customer's allotted hard drive space on the Arroyo server at Cablevision's facility; and (2) portions of programming are stored temporarily in buffer memory on Cablevision's servers.

i. *Arroyo Server Copies*

Cablevision does not deny that these copies are made in the operation of the RS-DVR, but, as the parties agree, the question is *who* makes the copies. Cablevision sees itself as entirely passive in the RS-DVR's recording process-it is the customer, Cablevision contends, who is "doing" the copying. To Cablevision, the RS-DVR is a machine, just like a VCR, STS-DVR, or a photocopier. Relying on *Sony* and other cases, Cablevision argues that it cannot be liable for copyright infringement for merely providing customers with the machinery to make copies. At most, it contends, its role with respect to the RS-DVR establishes indirect infringement, but plaintiffs have waived such a claim. (*See* June 7, 2006 Order). Plaintiffs, on the other hand, allege direct infringement-that is, they claim that it is Cablevision that is "doing" the copying here. Plaintiffs characterize the RS-DVR as a service-one that requires the continuing and active involvement of Cablevision.

I agree with plaintiffs. The RS-DVR is clearly a service, and I hold that, in providing this service, it is Cablevision that does the copying.

In *Sony,* programming owners sued Sony and others for copyright infringement based on defendants' marketing and sale of Betamax VCRs. The record showed that consumers primarily used VCRs for home "time-shifting"-the practice of recording a program to view it at a later time, then erasing it. The Supreme Court held that time-shifting is "fair use"[7] and does not violate the Copyright Act. 464

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[7] The "fair use" defense, set forth in § 107 of the Copyright Act, provides in relevant part:

> [T]he fair use of a copyrighted work ... for purposes such as criticism, comment, news reporting, teaching ..., scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include-
>
> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
>
> (2) the nature of the copyrighted work;
>
> (3) the amount and substantiality of the portion used

U.S. at 456. The Court held that Sony's manufacture of Betamax VCRs therefore did not constitute contributory infringement.

Cablevision's reliance on *Sony* is misguided. First, Cablevision has waived any arguments based on fair use. (*See* June 7, 2006 Order). Second, apart from their time-shifting functions, the RS-DVR and the VCR have little in common, and the relationship between Cablevision and potential RS-DVR customers is significantly different from the relationship between Sony and VCR users.

A VCR is a stand-alone piece of equipment. A consumer purchases the VCR and owns it outright. The consumer can then pick the VCR up, transport it, connect it to someone else's television and, assuming both devices are in working order, record programming. The RS-DVR does not have that stand-alone quality. An RS-DVR customer would not be able to disconnect his or her home set-top box, connect it elsewhere, and record programming. This is because the ·RS-DVR is not a single piece of equipment; it consists of a multitude of devices and processes. Unlike a VCR, the simple push of a button by the RS-DVR customer does not produce a recording. The pushing of the "record" button on the remote control merely sends a request to

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in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.
17 U.S.C. § 107.

Cablevision's head-end to set the recording process in motion. The various computers and devices owned and operated by Cablevision and located at its head-end are needed to produce a recording.

Indeed, ownership of the RS-DVR set-top box remains with Cablevision and the RS-DVR requires a continuing relationship between Cablevision and its customers. In *Sony,* "[t]he only contact between Sony and the users of the Betamax ... occurred at the moment of the sale." 464 U.S. at 438. In stark contrast, Cablevision would not only supply a set-top box for the customer's home, but it would also decide which programming channels to make available for recording and provide that content, and it would house, operate, and maintain the rest of the equipment that makes the RS-DVR's recording process possible. Cablevision has physical control of the equipment at its head-end, and its personnel must monitor the programming streams at the head-end and ensure that the servers are working properly. (Tr. 52-54, 75-76). Cablevision determines how much memory to allot to each customer and reserves storage capacity for each on a hard drive at its facility, and customers may very well be offered the option of acquiring additional capacity-for a fee. On the other hand, once Sony sells a VCR to a customer, Sony need not do anything further for the VCR to record.

The ongoing participation by Cablevision in the recording process also sets the RS-DVR apart from the STS-DVR. Cablevision claims that with both, the customer is "doing" the copying, and it points to the fact that no programmer ... has ever sued Cablevision or any other cable operator in connection with its providing set-top storage DVRs to its customers (Defs. Mem. at 16). By extension, the RS-DVR, it argues, presents no copyright infringement.

This argument is unavailing. The fact that plaintiffs and other programming owners have not sued cable operators over the legality of STS-DVRs does not insulate the RS-DVR from such a challenge. Cablevision has not asserted any affirmative defenses to that effect, nor have plaintiffs conceded the legality of STS-DVRs. In any event, Cablevision's attempt to analogize the RS-DVR to the STS-DVR fails. The RS-DVR may have the look and feel of an STS-DVR (*see* Defs. Ex. 101), but "under the hood" the two types of DVRs are vastly different. For example, to effectuate the RS-DVR, Cablevision must reconfigure the linear channel programming signals received at its head-end by splitting the APS into a second stream, reformatting it through clamping, and routing it to the Arroyo servers. The STS-DVR does not require these activities. The STS-DVR can record directly to the hard drive located within the set-top box itself; it does not need the complex computer network and constant monitoring by Cablevision personnel necessary for the RS-DVR to record and store programming.

The RS-DVR, contrary to defendants' suggestions, is more akin to VOD than to a VCR, STS-DVR, or other time-shifting device. In fact, the RS-DVR is based on a modified VOD platform. (Hartson Report ¶ 114; Tr. 82). With both systems, Cablevision decides what content to make available to customers for on-demand viewing. The programming available for viewing is stored outside the customer's home at Cablevision's head-end. Both utilize a "session resource manager," such as the eSRM used by the RS-DVR, to set up a temporary pathway to deliver programming in encrypted form to the customer for playback; decryption information is transmitted in both systems to the customer's set-top box. (Hartson Report ¶ 120). The number of available pathways for programming delivery in both systems is limited; if there are none available, the customer gets an error message or busy signal. (*Id.*). Thus, in its architecture and delivery method, the RS-DVR bears striking resemblance to VOD-a service that Cablevision provides pursuant to licenses negotiated with programming owners. (*See* Tr. 84-85).

Defendants cite a host of cases to buttress their argument that the RS-DVR is not a service like VOD, but a machine that allows customers to engage in copying. None of these cases is helpful to defendants. For example, defendants cite two cases for the proposition that a company that makes photocopiers available to the public on its premises is not subject to liability for direct infringement unless the company's employees do the copying themselves. *See Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522 (S.D.N.Y. 1991); *Princeton Univ. Press v. Michigan Document Servs., Inc.*, 99 F.3d 1381 (6th Cir. 1996). In both cases college professors provided copyrighted material to a copy center, which assembled the material into "coursepacks" and sold them to students without paying royalties or obtaining permission from the copyright holders, and in both cases the copy center was found directly liable for infringement.

Here, Cablevision would have a similarly active role. Cablevision, through its RS-DVR, would not merely house copying machinery on its premises for customers to engage in copying. Rather, Cablevision would be "doing" the copying, notwithstanding that the copying would be done at the customer's behest, and Cablevision would provide the content being copied. These cases and others cited by defendants are thus inapposite. *See also RCA Records v. All-Fast Sys., Inc.,* 594 F. Supp. 335, 338 (S.D.N.Y. 1984) (holding retail copy service that operated cassette copying machine used to copy copyrighted sound recordings liable for direct infringement, even though copies were made at request of customers).

Cablevision also relies, to no avail, on *Religious Techn. Ctr. v. Netcom On-Line Commc'n Servs., Inc.,* 907 F. Supp. 1361 (N.D. Cal. 1995), and subsequent cases brought against Internet service providers ("ISPs") for copyright infringement committed by their customers. In *Netcom,* an individual posted copyrighted material in a message on a computer bulletin board service ("BBS"). By operation of the ISP's software, the posting to the BBS automatically resulted in the copying of the message to the ISP's computers, where the copies were stored briefly. The court declined to find the ISP liable for direct infringement based on these copies, concluding that it is virtually impossible for an ISP to filter out infringing data. This conclusion was premised on the unique attributes of the Internet, for "the court [did] not find workable a theory of infringement that would hold the entire Internet liable for activities that cannot reasonably be deterred. Billions of bits of data flow through the Internet and are necessarily stored on servers throughout the network." *Id.* at 1372.

Cablevision, however, is not similarly situated to an ISP. Cablevision is not confronted with the free flow of information that takes place on the Internet, which makes it difficult for ISPs to control the content they carry. Cablevision has unfettered discretion in selecting the programming that it would make available for recording through the RS-DVR and is the driving force behind the RS-DVR's recording and playback functions. Indeed, at one point Cablevision considered limiting the RS-DVR to just twelve or fifty channels before deciding on including all 170 channels. This situation is a far cry from the ISP's role as a passive conduit in *Netcom*. Furthermore, the copies made to the ISP's computers in *Netcom* were incidental to the ISP's providing Internet access. The copies that would be made through the RS-DVR, in contrast, are instrumental to the RS-DVR's operation. Defendants' reliance on *Netcom* and its progeny is therefore misplaced.

On the record before the Court, a reasonable factfinder could only conclude that the copying at issue-the copying of programming to the RS-DVR's Arroyo servers-would be done not by the customer but by Cablevision, albeit at the customer's request. This copying would, as a matter of law, constitute copyright infringement.

ii. ***Buffer "Copies"***

Defendants deny that the portions of programming temporarily stored in buffer memory during the RS-DVR's operation are "copies" for purposes of the Copyright Act. Under the Copyright Act, "copies" are defined as:

> [M]aterial objects ... in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies"includes the material object ... in which the work is first fixed.

17 U.S.C. § 101.

The buffer copies here, defendants contend, cannot be considered infringing copies because they are "not fixed" and are "otherwise de minimis." (Defs. Mem. at 29). The Copyright Act, however, provides that a work is "fixed" if it "is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." *Id.* Here, as discussed, the portions of programming residing in buffer memory are used to make permanent copies of entire programs on the Arroyo servers. Clearly, the buffer copies are capable of being reproduced. Furthermore, the buffer copies, in the aggregate, comprise the whole of plaintiffs' programming. For instance, while it is true that only three frames of each program carried on the linear channels are resident in the primary ingest buffer at any given time, ultimately, however, the entire programming content for each channel will pass through the primary ingest buffer. The aggregate effect of the buffering that takes place in the operation of the RS-DVR can hardly be called de minimis.

Furthermore, numerous courts have held that the transmission of information through a computer's random access memory or RAM, as is the case with the buffering here, creates a "copy" for purposes of the Copyright Act. *See, e.g., Stenograph L.L.C. v. Bossard Assoc., Inc.,* 144 F.3d 96, 100 (D.C. Cir. 1998) (loading of software into RAM is "copying"); *Triad Sys. Corp. v. Southeastern Express Co.,* 64 F.3d 1330, 1335 (9th Cir. 1995) (same); *MAI Sys. Corp. v. Peak Computer, Inc.,* 991 F.2d 511, 519 (9th Cir. 1993) (same); *Marobie-FL., Inc. v. Nat'l Ass'n of Fire Equip. Distrib.,* 983 F. Supp. 1167, 1177-78 (N.D. Ill. 1997) (downloading of file from website constitutes "copying" by host computer, where portions of file pass through RAM before being immediately transmitted over Internet).

Indeed, the United States Copyright Office, in its August 2001 report on the Digital Millennium Copyright Act[8] ("DMCA Report"),[9] has indicated that buffer copies are "copies" within the meaning of the Copyright Act. Specifically, the Copyright Office concluded that temporary copies of a work in RAM are generally "fixed" and thus constitute "copies" within the scope of the copyright owner's right of reproduction, so long as they exist for a sufficient amount of time to be capable of being copied, perceived or communicated. (DMCA Report at xxii, 110-11).

Because I conclude that Cablevision, through operation of its proposed RS-DVR, would "copy" plaintiffs' programming both in the Arroyo servers and in buffer memory, in violation of plaintiffs' exclusive right of reproduction under the Copyright Act, summary judgment is granted in favor of plaintiffs in this respect. Cablevision is hereby enjoined from so copying plaintiffs' copyrighted works, unless it obtains a license to do so.

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[8] The DMCA was enacted into law in October 1998 to bring copyright law in line with the digital age. *See* S. Rep. No. 105-190, at 1-2 (1998).

[9] *See* U.S. Copyright Office, *DMCA Section 104 Report*, at 107-17 (Aug.2001), *available at* http:// www. copyright. gov/ reports/ studies/ dmca/ dmca_ study. html.

2. *Is Cablevision Making Unauthorized Transmissions?*

As discussed, for the RS-DVR to work, the programming stream that Cablevision receives at its head-end must be split into a second stream, reformatted, and routed to the Arroyo server system. When a customer requests playback of a recorded program, the program must be retrieved from the Arroyo server and transmitted to the customer. This transmission, plaintiffs contend, is an unauthorized public performance by Cablevision of their copyrighted works.

To "perform" a work, as defined in the Copyright Act, is "to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible." 17 U.S.C. § 101. Cablevision does not contest that the streaming of recorded programming in response to a customer's request is a performance. It again suggests, however, that it is passive in this process-that it is the customer, not Cablevision, that is "doing" the performing. I reject this suggestion, for the same reasons that I reject the argument that the customer is "doing" the copying involved in the RS-DVR. Cablevision actively participates in the playback process. The customer's use of the remote control to select a recorded program for viewing does not, in itself, result in playback. *Compare with Columbia Pictures Indus., Inc. v. Redd Horne, Inc.*, 749 F.2d

154, 159 (3d Cir. 1984) (one who actually places a video cassette in the video cassette player and operates the controls "performs" because that activity results in the sequential showing of the movie's images accompanied by sound). The customer's command triggers the playback process, but again, it is Cablevision and its operation of an array of computer servers at the head-end that actually make the retrieval and streaming of the program possible.

Cablevision next posits that even if it is "doing" the performing, such performance is fundamentally private, for each streaming emanates from a distinct copy of a program uniquely associated with one customer's set-top box and intended for that customer's exclusive viewing in his or her home. This argument, too, is flawed.

The Copyright Act provides, in relevant part, that to "perform" a work "publicly" is:

> [T]o transmit or otherwise communicate a performance or display of the work ... to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

17 U.S.C. § 101 (emphasis added). This part of the definition of public performance is known as the "transmit clause." Under the plain language of this

clause, a transmission "to the public" is a public performance, even if members of the public receive the transmission at separate places at different times. Such is the case here. Cablevision would transmit the same program to members of the public, who may receive the performance at different times, depending on whether they view the program in real time or at a later time as an RS-DVR playback.

Furthermore, where the relationship between the party sending a transmission and party receiving it is commercial, as would be the relationship between Cablevision and potential RS-DVR customers, courts have determined that the transmission is one made "to the public." *See On Command Video Corp. v. Columbia Pictures Indus.*, 777 F. Supp. 787, 790 (N.D. Cal. 1991).

On Command is instructive. There, the plaintiff developed a system for the electronic delivery of movie videos to hotel guest rooms. The system's computer equipment and bank of video cassette players ("VCPs") were centrally housed, and the VCPs were wired to the guest rooms. The hotel guest, using a remote control and an on-screen menu from her room, could at any time select a movie, which could only be seen in that room. Defendants, who owned the copyrights in the movies shown through the system, claimed that the system's video transmissions were public performances. The court agreed, holding that because the relationship between the transmitter of the performance and the audience was commercial, the performance was "to the public," even though hotel guests were watching the videos in a decidedly non-public place. In so holding, the court cited the language of the Copyright Act providing that a performance may still be public even though it reaches members of the public at different times and places. *Id.* at 790 (citing 17 U.S.C. § 101). It further pointed to the legislative history:

> [A] performance made available by transmission to the public at large is "public" even though the recipients are not gathered in a single place.... The same principles apply whenever the potential recipients of the transmission represent a limited segment of the public, such as the occupants of hotel rooms ....; they are also applicable where the transmission is capable of reaching different recipients at different times, as in the case of sounds or images stored in an information system and capable of being performed or displayed at the initiative of individual members of the public.

Id. (citing H.R. Rep. No. 90-83, at 29 (1967)). Accordingly, the court concluded "whether the number of hotel guests viewing an On Command transmission is one or one hundred, and whether these guests view the transmission simultaneously or sequentially, the transmission is still a public performance since it goes to members of the public." *Id.*

Similarly, in *Redd Horne,* the Third Circuit stated:

> [T]he transmission of a performance to members of the public, even in private settings such as hotel rooms or [private viewing rooms open to the public], constitutes a public performance. As the statutory language and legislative history [of the Copyright Act] clearly indicate, the fact that members of the public view the performance at different times does not alter this legal consequence.

749 F.2d at 159. There, the defendants operated video sale and rental stores, where they set up private viewing booths so that customers could watch copyrighted movie video tapes.

In both *Redd Horne* and *On Command,* the party providing the video service had discretion over what content was available to customers; the customer selected the programming he or she wished to view; the service provider supplied the content from one location to another location for the customer's exclusive viewing; and the service provider supplied the same content to other customers at different times. Cablevision is no different from the *On Command* and *Redd Horne* service providers, and its streaming of a program recorded with the RS-DVR back to the requesting customer is no less a public performance than the transmissions in those cases.

I hold, as a matter of law, that Cablevision would engage in public performance of plaintiffs' copyrighted works in operating its proposed RS-DVR service, thereby infringing plaintiffs' exclusive rights under the Copyright Act. Summary judgment is granted in favor of plaintiffs in this respect as well. Absent the appropriate licenses, Cablevision is hereby enjoined from engaging in such public performance.

CONCLUSION

For the reasons set forth above, plaintiffs' motions for summary judgment are granted, and defendants' motion for summary judgment is denied. Defendants' counterclaim is dismissed with prejudice. Cablevision is permanently enjoined, in connection with its proposed RS-DVR system, from (1) copying plaintiffs' copyrighted works and (2) engaging in public performance of plaintiffs' copyrighted works, unless it obtains licenses to do so. Plaintiffs shall submit a proposed judgment, on notice, within seven business days hereof. Costs will be awarded.

SO ORDERED.

Appendix C

Constitutional and Statutory Provisions Involved

U.S. Const. art. I § 8, cl. 8

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;

17 U.S.C. § 101

§ 101. Definitions

* * * *

"Copies" are material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.

* * * *

A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title if a fixation of the work is being made simultaneously with its transmission.

* * * *

To "perform" a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.

* * * *

To perform or display a work "publicly" means--

(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or

(2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

* * * *

To "transmit" a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.

* * * *

17 U.S.C. § 106

§ 106. Exclusive rights in copyrighted works

Subject to sections 107 through 122, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

(1) to reproduce the copyrighted work in copies or phonorecords;

(2) to prepare derivative works based upon the copyrighted work;

(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;

(4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly;

(5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and

(6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

17 U.S.C. § 111

§ 111. Limitations on exclusive rights: Secondary transmissions

* * * *

(c) Secondary Transmissions by Cable Systems.--

(1) Subject to the provisions of clauses (2), (3), and (4) of this subsection and section 114(d), secondary transmissions to the public by a cable system of a performance or display of a work embodied in a primary transmission made by a broadcast station licensed by the Federal Communications Commission or by an appropriate governmental authority of Canada or Mexico shall be subject to statutory licensing upon compliance with the requirements of subsection (d) where the carriage of the signals comprising the secondary transmission is permissible under the rules, regulations, or authorizations of the Federal Communications Commission.

(2) Notwithstanding the provisions of clause (1) of this subsection, the willful or repeated secondary transmission to the public by a cable system of a primary transmission made by a broadcast station licensed by the Federal Communications Commission or by an appropriate governmental

authority of Canada or Mexico and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and 509, in the following cases:

(A) where the carriage of the signals comprising the secondary transmission is not permissible under the rules, regulations, or authorizations of the Federal Communications Commission; or

(B) where the cable system has not deposited the statement of account and royalty fee required by subsection (d).

(3) Notwithstanding the provisions of clause (1) of this subsection and subject to the provisions of subsection (e) of this section, the secondary transmission to the public by a cable system of a performance or display of a work embodied in a primary transmission made by a broadcast station licensed by the Federal Communications Commission or by an appropriate governmental authority of Canada or Mexico is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and sections 509 and 510, if the content of the particular program in which the performance or display is embodied, or any commercial advertising or station announcements transmitted by the primary transmitter during, or immediately before or after, the transmission of

such program, is in any way willfully altered by the cable system through changes, deletions, or additions, except for the alteration, deletion, or substitution of commercial advertisements performed by those engaged in television commercial advertising market research: Provided, That the research company has obtained the prior consent of the advertiser who has purchased the original commercial advertisement, the television station broadcasting that commercial advertisement, and the cable system performing the secondary transmission: And provided further, That such commercial alteration, deletion, or substitution is not performed for the purpose of deriving income from the sale of that commercial time.

(4) Notwithstanding the provisions of clause (1) of this subsection, the secondary transmission to the public by a cable system of a performance or display of a work embodied in a primary transmission made by a broadcast station licensed by an appropriate governmental authority of Canada or Mexico is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and section 509, if (A) with respect to Canadian signals, the community of the cable system is located more than 150 miles from the United States--Canadian border and is also located south of the forty-second parallel of latitude, or (B) with respect to Mexican signals, the secondary transmission is made by a cable

system which received the primary transmission by means other than direct interception of a free space radio wave emitted by such broadcast television station, unless prior to April 15, 1976, such cable system was actually carrying, or was specifically authorized to carry, the signal of such foreign station on the system pursuant to the rules, regulations, or authorizations of the Federal Communications Commission.

* * * *

(f) Definitions.--As used in this section, the following terms and their variant forms mean the following:

A "primary transmission" is a transmission made to the public by the transmitting facility whose signals are being received and further transmitted by the secondary transmission service, regardless of where or when the performance or display was first transmitted.

A "secondary transmission" is the further transmitting of a primary transmission simultaneously with the primary transmission, or nonsimultaneously with the primary transmission if by a "cable system" not located in whole or in part within the boundary of the forty-eight contiguous States, Hawaii, or Puerto Rico: Provided, however, That a nonsimultaneous further transmission by a cable system located in Hawaii of a primary transmission shall be deemed to be a secondary transmission if the carriage of the television broadcast signal comprising such further transmission is permissible under the rules, regulations, or authorizations of the Federal Communications Commission.

* * * *

17 U.S.C. § 114

§ 114. Scope of exclusive rights in sound recordings

* * * *

(d) Limitations on exclusive right.--Notwithstanding the provisions of section 106(6)--

* * * *

(3) Licenses for transmissions by interactive services.--

(A) No interactive service shall be granted an exclusive license under section 106(6) for the performance of a sound recording publicly by means of digital audio transmission for a period in excess of 12 months, except that with respect to an exclusive license granted to an interactive service by a licensor that holds the copyright to 1,000 or fewer sound recordings, the period of such license shall not exceed 24 months: Provided, however, That the grantee of such exclusive license shall be ineligible to receive another exclusive license for the performance of that sound recording for a period of 13 months from the expiration of the prior exclusive license.

(B) The limitation set forth in subparagraph (A) of this paragraph shall not apply if--

(i) the licensor has granted and there remain in effect licenses under section 106(6) for the public performance of sound recordings by means of digital audio transmission by at least 5 different interactive services: Provided, however, That each such license must be for a minimum of 10 percent of the copyrighted sound recordings owned by the licensor that have been licensed to interactive services, but in no event less than 50 sound recordings; or

(ii) the exclusive license is granted to perform publicly up to 45 seconds of a sound recording and the sole purpose of the performance is to promote the distribution or performance of that sound recording.

(C) Notwithstanding the grant of an exclusive or nonexclusive license of the right of public performance under section 106(6), an interactive service may not publicly perform a sound recording unless a license has been granted for the public performance of any copyrighted musical work contained in the sound recording: Provided, That such license to publicly perform the copyrighted musical work may be granted either by a performing rights society representing the copyright owner or by the copyright owner.

(D) The performance of a sound recording by means of a retransmission of a digital audio transmission is not an infringement of section 106(6) if--

(i) the retransmission is of a transmission by an interactive service licensed to publicly perform the sound recording to a particular member of the public as part of that transmission; and

(ii) the retransmission is simultaneous with the licensed transmission, authorized by the transmitter, and limited to that particular member of the public intended by the interactive service to be the recipient of the transmission.

(E) For the purposes of this paragraph--

(i) a "licensor" shall include the licensing entity and any other entity under any material degree of common ownership, management, or control that owns copyrights in sound recordings; and

(ii) a "performing rights society" is an association or corporation that licenses the public performance of nondramatic musical works on behalf of the copyright owner, such as the American Society of Composers, Authors and Publishers, Broadcast Music, Inc., and SESAC, Inc.

* * * *

(j) Definitions.--As used in this section, the following terms have the following meanings:

* * * *

> (7) An "interactive service" is one that enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording, whether or not as part of a program, which is selected by or on behalf of the recipient. The ability of individuals to request that particular sound recordings be performed for reception by the public at large, or in the case of a subscription service, by all subscribers of the service, does not make a service interactive, if the programming on each channel of the service does not substantially consist of sound recordings that are performed within 1 hour of the request or at a time designated by either the transmitting entity or the individual making such request. If an entity offers both interactive and noninteractive services (either concurrently or at different times), the noninteractive component shall not be treated as part of an interactive service.

* * * *

17 U.S.C. § 501

§ 501. Infringement of copyright

(a) Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 122 or of the author as provided in section

106A(a), or who imports copies or phonorecords into the United States in violation of section 602, is an infringer of the copyright or right of the author, as the case may be. For purposes of this chapter (other than section 506), any reference to copyright shall be deemed to include the rights conferred by section 106A(a). As used in this subsection, the term "anyone" includes any State, any instrumentality of a State, and any officer or employee of a State or instrumentality of a State acting in his or her official capacity. Any State, and any such instrumentality, officer, or employee, shall be subject to the provisions of this title in the same manner and to the same extent as any nongovernmental entity.

* * * *

17 U.S.C. § 512

§ 512. Limitations on liability relating to material online

(a) Transitory digital network communications.--A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the provider's transmitting, routing, or providing connections for, material through a system or network controlled or operated by or for the service provider, or by reason of the intermediate and transient storage of that material in the course of such transmitting, routing, or providing connections, if--

(1) the transmission of the material was initiated by or at the direction of a person other than the service provider;

(2) the transmission, routing, provision of connections, or storage is carried out through an automatic technical process without selection of the material by the service provider;

(3) the service provider does not select the recipients of the material except as an automatic response to the request of another person;

(4) no copy of the material made by the service provider in the course of such intermediate or transient storage is maintained on the system or network in a manner ordinarily accessible to anyone other than anticipated recipients, and no such copy is maintained on the system or network in a manner ordinarily accessible to such anticipated recipients for a longer period than is reasonably necessary for the transmission, routing, or provision of connections; and

(5) the material is transmitted through the system or network without modification of its content.

(b) System caching.--

(1) Limitation on liability.--A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or

other equitable relief, for infringement of copyright by reason of the intermediate and temporary storage of material on a system or network controlled or operated by or for the service provider in a case in which--

(A) the material is made available online by a person other than the service provider;

(B) the material is transmitted from the person described in subparagraph (A) through the system or network to a person other than the person described in subparagraph (A) at the direction of that other person; and

(C) the storage is carried out through an automatic technical process for the purpose of making the material available to users of the system or network who, after the material is transmitted as described in subparagraph (B), request access to the material from the person described in subparagraph (A),

if the conditions set forth in paragraph (2) are met.

(2) Conditions.--The conditions referred to in paragraph (1) are that--

(A) the material described in paragraph (1) is transmitted to the subsequent users described in paragraph (1)(C) without modification to its content from the manner in which the material was transmitted from the person described in paragraph (1)(A);

(B) the service provider described in paragraph (1) complies with rules concerning the refreshing, reloading, or other updating of the material when specified by the person making the material available online in accordance with a generally accepted industry standard data communications protocol for the system or network through which that person makes the material available, except that this subparagraph applies only if those rules are not used by the person described in paragraph (1)(A) to prevent or unreasonably impair the intermediate storage to which this subsection applies;

(C) the service provider does not interfere with the ability of technology associated with the material to return to the person described in paragraph (1)(A) the information that would have been available to that person if the material had been obtained by the subsequent users described in paragraph (1)(C) directly from that person, except that this subparagraph applies only if that technology--

(i) does not significantly interfere with the performance of the provider's system or network or with the intermediate storage of the material;

(ii) is consistent with generally accepted industry standard communications protocols; and

(iii) does not extract information from the provider's system or network other than the information that would have been available to the person described in paragraph (1)(A) if the subsequent users had gained access to the material directly from that person;

(D) if the person described in paragraph (1)(A) has in effect a condition that a person must meet prior to having access to the material, such as a condition based on payment of a fee or provision of a password or other information, the service provider permits access to the stored material in significant part only to users of its system or network that have met those conditions and only in accordance with those conditions; and

(E) if the person described in paragraph (1)(A) makes that material available online without the authorization of the copyright owner of the material, the service provider responds expeditiously to remove, or disable access to, the material that is claimed to be infringing upon notification of claimed infringement as described in subsection (c)(3), except that this subparagraph applies only if--

(i) the material has previously been removed from the originating site or access to it has been disabled, or a court has ordered that the material be removed from the originating site or that access to the material on the originating site be disabled; and

(ii) the party giving the notification includes in the notification a statement confirming that the material has been removed from the originating site or access to it has been disabled or that a court has ordered that the material be removed from the originating site or that access to the material on the originating site be disabled.

(c) Information residing on systems or networks at direction of users.--

(1) In general.--A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider, if the service provider--

(A)(i) does not have actual knowledge that the material or an activity using the material on the system or network is infringing;

(ii) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or

(iii) upon obtaining such knowledge or awareness, acts expeditiously to remove, or disable access to, the material;

(B) does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity; and

(C) upon notification of claimed infringement as described in paragraph (3), responds expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity.

(2) Designated agent.--The limitations on liability established in this subsection apply to a service provider only if the service provider has designated an agent to receive notifications of claimed infringement described in paragraph (3), by making available through its service, including on its website in a location accessible to the public, and by providing to the Copyright Office, substantially the following information:

(A) the name, address, phone number, and electronic mail address of the agent.

(B) other contact information which the Register of Copyrights may deem appropriate.

The Register of Copyrights shall maintain a current directory of agents available to the public for inspection, including through the Internet, in both electronic and hard copy formats, and may require payment of a fee by service providers to cover the costs of maintaining the directory.

(3) Elements of notification.--

(A) To be effective under this subsection, a notification of claimed infringement must be a written communication provided to the designated agent of a service provider that includes substantially the following:

(i) A physical or electronic signature of a person authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.

(ii) Identification of the copyrighted work claimed to have been infringed, or, if multiple copyrighted works at a single online site are covered by a single notification, a representative list of such works at that site.

(iii) Identification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the material.

(iv) Information reasonably sufficient to permit the service provider to contact the complaining party, such as an address, telephone number, and, if available, an electronic mail address at which the complaining party may be contacted.

(v) A statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.

(vi) A statement that the information in the notification is accurate, and under penalty of perjury, that the complaining party is authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.

(B)(i) Subject to clause (ii), a notification from a copyright owner or from a person authorized to act on behalf of the copyright owner that fails to comply substantially with the provisions of subparagraph (A) shall not be considered under paragraph (1)(A) in determining whether a service provider has actual knowledge or is aware of facts or circumstances from which infringing activity is apparent.

(ii) In a case in which the notification that is provided to the service provider's designated agent fails to comply substantially with all the provisions of subparagraph (A) but substantially complies with clauses (ii), (iii), and (iv) of subparagraph (A), clause (i) of this subparagraph applies only if the service provider promptly attempts to contact the person making the notification or takes other reasonable steps to assist in the receipt of notification that substantially complies with all the provisions of subparagraph (A).

(d) Information location tools.--A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the provider referring or linking users to an online location containing infringing material or infringing activity, by using information location tools, including a directory, index, reference, pointer, or hypertext link, if the service provider--

(1)(A) does not have actual knowledge that the material or activity is infringing;

(B) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or

(C) upon obtaining such knowledge or awareness, acts expeditiously to remove, or disable access to, the material;

(2) does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity; and

(3) upon notification of claimed infringement as described in subsection (c)(3), responds expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity, except that, for purposes of this paragraph, the information described in subsection (c)(3)(A)(iii) shall be identification of the reference or link, to material or activity claimed to be infringing, that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate that reference or link.

* * * *

(i) Conditions for eligibility.--

(1) Accommodation of technology.--The limitations on liability established by this section shall apply to a service provider only if the service provider--

(A) has adopted and reasonably implemented, and informs subscribers and account holders of the service provider's system or network of, a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers; and

(B) accommodates and does not interfere with standard technical measures.

(2) Definition.--As used in this subsection, the term "standard technical measures" means technical measures that are used by copyright owners to identify or protect copyrighted works and--

(A) have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process;

(B) are available to any person on reasonable and nondiscriminatory terms; and

(C) do not impose substantial costs on service providers or substantial burdens on their systems or networks.

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